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Butler Ames

History of Lowell and Its People

BY

FREDERICK W. COBURN



ILLUSTRATED

VOLUME I.

LEWIS HISTORICAL PUBLISHING COMPANY
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FOREWORD

THE CITY BENEFICENT: A TRIBUTE

To the city which gave me such education as I was able to assimilate in boyhood, through its schools, its library and other institutions, and through its industrial and commercial life, I should like to think that some reader may feel this book to be a tribute of gratitude. It is meant to be that, as well as a record of happenings.

Lowell of 1885 and thereabout stays in memory *in loco parentis*—a third parent, as it were, complementing by the influence of training and surroundings whatever of endowment may have come down from respected ancestors. I believe that every man and woman who has had the advantage of spending a childhood in our city will gladly acknowledge his indebtedness to a community in which, whatever its shortcomings, a spirit of friendliness and helpfulness has always been paramount. From my early infancy until as a young man I went elsewhere, our city gave continuously of its opportunities, and, imperfectly as I received them, I still might hope to have the ability to render some small gift in grateful recognition.

This work may or may not come under that category; it at least has been compiled with a hope of its being to some possessor of inspirational as well as informational value.

In gathering material and in otherwise preparing myself to write the work that follows, I have tried to think of the community as a social organism, a modern analogue of the "City-State" of the ancients, its development, era by era, to be traced at least suggestively and picturesquely. The so-called economic interpretation of history has come to appeal strongly to most men of my temperament and turn of mind, and this particular subject, which was assigned me to cover by the publishers in January, 1917, has naturally lent itself to a somewhat intensive study of the impingement of successive culture epochs on a single locality. Without, therefore, neglecting the conventional topics of an archivist and biographical sort that are inevitably taken up in histories of this kind, I have endeavored to stress the basic industries of the locality and the reaction of the inhabitants upon the conditions created by these. This treatment has necessitated departing somewhat from the departmentalizing that is usual in local histories. As a reader I have always felt that separate consideration of topics, as of "politics," "commerce and manufactures," "law and lawyers," "physi-

cians," "art and artists," while perhaps logically justified as a matter of convenience of record, hinders the formation of any clear mental picture of the characteristics of successive eras. I have, accordingly, thrown much material which might have appeared in departmental form, into the narrative sections of the work. In arranging these latter I have in a general way followed a plan of taking up first the economic aspects of the period, then the development during that period of public and privately controlled institutions, and, finally, the personal and anecdotal material that serves to illustrate the character of the time.

The one-hundredth anniversary of the founding of the city will be at hand soon after this book is on the reading tables of those who have subscribed for it. The successive occurrences in celebration of the advent of cotton manufacturing at East Chelmsford, the incorporation of the town and its re-incorporation ten years later as a city, will, no doubt, give publicity to many new and valuable local historical contributions. It is hoped that this work, though published a little in advance of the earliest of these celebrations, may seem worthy to be regarded as one of the commemorative efforts appropriate to the third decade of this century at Lowell. It has been prepared during two and one-half years of most eventful general history. The coöperation of several friends of expert qualification has helped to give confidence in the work's not being entirely slight or perfunctory. Indebtedness is especially acknowledged to the late Judge Samuel P. Hadley, who headed our advisory board, who lent without stint from his private library and gave freely of his remarkably accurate personal recollections, and who had practically finished reading the proofs of the history when his final illness, in March, 1919, came to interrupt all his beneficent activities. The book necessarily leaves many things unsaid, for a city accumulates much wealth of historical material in a century, and the historian's problem is ever one of selection. Such as it is, it is proffered as one of the tributes to be paid in the next few years to the solid citizenry of the neighborhood and the far-seeing Bostonians who conjointly, in 1822, began the upbuilding of the first modern industrial city in America.

THE AUTHOR.

NOTE—The publishers desire to express their grateful appreciation of encouragement and assistance afforded by the late Judge Samuel P. Hadley; Mr. Philip S. Marden, President of the Courier-Citizen Publishing Company; Mr. Charles H. Fames, S. B., Principal of the Lowell Textile School; Mr. Lewis E. MacBrayne, author and litterateur; and last, but by no means least, Mr. Robert F. Marden, President of the Lowell Board of Trade, through whose instrumentality the pages of the present History are adorned with a considerable number of excellent illustrations.

THE PUBLISHERS.

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LOOKING DOWN THE MERRIMACK RIVER FROM ANDOVER STREET.
Showing Pool at Head of Proposed Navigation Channel.

CHAPTER I.

Lowell a Landmark in National Industry.

Judge Josiah Gardner Abbott, in a letter to the committee of the fiftieth anniversary exercises commemorating the incorporation of the city of Lowell, writes: "Lowell marks the beginning of an epoch in the history, not only of New England but of the whole country. With the foundations of Lowell were laid the foundations of the manufacturing industry of the whole country."

It is Lowell, in fact, the city, American, progressive, of characteristic annals and normal present activities, that must be the theme of any history, seriously meant, which can at this time be written from the records of the industrial centre at the junction of the Merrimack and Concord rivers in Northeastern Massachusetts. This is not a Mecca of tourists and amateur photographers. It has interesting houses, though few of them can with any accuracy be called colonial. It has a fascinating history, but this is not of the kind that makes Salem and Plymouth and Boston hallowed ground. A student of history of advanced tendencies will find in Lowell immensely rich material with which to illustrate the course of industrialism in America. The historian, on the other hand, who looks only for thrills and throbs, for the achievements of great men in war and politics, will soon see that Lowell offers a limited field.

As the oldest of our manufacturing cities, in brief, Lowell is the well-nigh perfect example of its kind—the first to be founded on any considerable scale; in present status and promise of further civic advance, by no means the least interesting.

Such cities, wherever situated, follow a course of development that can ordinarily be predicted. An industry or group of industries fixes upon a locality as suitable for exploitation of resources and employment of the local labor.

Capital, in other words, has seen an opportunity for favorable investment. New machinery is set up in factories or workshops, and work that pays better, at least in point of cash disbursements, than that previously available begins to tempt people from the adjacent farms. The commencement of an actual city, with an ambitious scheme of streets and public buildings, with provisions for housing the newly collected army of wage-earners, is usually quite rapid. Scores of American municipalities assert with pride that they sprang up overnight.

This phenomenon of the quick rise of communities is, of course, just as common to-day, especially in the western part of the United

States and in the Canadian northwest, as it was nearly a century ago when the sudden emergence of urban Lowell from the hamlet of East Chelmsford was accounted one of the wonders of American life.

Once established, an American industrial city seldom loses the character imparted to it in its first years. The locality may not seem, to after generations, to have been ideally chosen for the particular kind of enterprises out of which its original prosperity grew. Its start in life may often have been almost fortuitous. Yet, through hard times and boom times, the city continues to attract employers and workers. Though it may even be at a distance from supplies of raw material, and may be hampered by its geographical position as regards the largest consuming centres, nevertheless, decade by decade, the characteristic American municipality shows a growth in population and wealth quite out of proportion, as a rule, to the advancement of the country surrounding it.

So that the persistence of the basic industries of Lowell is true to American form. In the last two decades of the nineteenth century, when southern cities began to chronicle the building of factories close to the cotton fields and adjacent to abundant water power and cheap coal, pessimists were not wanting in New England who predicted a gradual decline of the communities on the Merrimack whose welfare has been dependent largely upon textile manufacturing. There were those who in 1890 foresaw a shrunken village where once spindles had been counted by the hundreds of thousands.

Such catastrophes rarely befall, and Lowell has shown the energy and adaptability characteristic of American municipalities. It has stood up under competition; it has yielded to no "fell clutch of circumstance."

Progressively cosmopolitan the American city is. A wage-earning population at first is drawn from the neighboring farms and villages. The country capitalist who moves into the new town to engage in business on a larger scale than his neighborhood has known before, employs his relatives and neighbors. The city at the outset may be urban in name and numbers; its ways are still essentially those of rural North America. Presently, however, as it becomes increasingly difficult to induce the sons and daughters of the farm to work at the wages paid under competitive conditions in the urban workshops, and as at the same time the growing demand for the city's products tends to exhaust the local supply of labor, employers, thus situated, reach out for the help of immigrants. Adventurous folk from other lands, seeking the advantages of a political democracy, are welcomed as workers. A few members of a nationality establish themselves, and these are quickly followed by others from the same foreign town or countryside. Hardly have these newcomers taken up a definite quarter in the

city, often one abandoned by native Americans, when the pioneers of quite a different race may arrive and start among themselves a similar process of acclimatization. Soon the immigrants may constitute a majority of the people, but they are in the midst of such processes of Americanization that they fit without making much trouble into the scheme of life that was adopted by the fathers of the city. Lowell, as one of the oldest of American industrial cities, is appropriately one of the most cosmopolitan.

American cities have been somewhat slower than from European or Australian example might have been expected to become "communities" in the strictest sense of the word. Often they have been a little neglectful of the factors that make for an equation of the common life. For various reasons it has been relatively hard for ten thousand, one hundred thousand or a million persons composing an American city to behave as if their interests were substantially identical. The early settlers of this country were stout individualists, having the pioneering disposition; and each man was inclined to clear his tract of the wilderness in his own way. Usually the founders of the cities of to-day were men who had inherited the temperament of these pioneers. Many American manufacturing cities, furthermore, had their beginning, as Lowell had, at about the period of the world's history when the ideas of the so-called "Manchester school of economics" in England were at their height of popular acceptance, and when the notion of avoiding public interference with personal liberty had its warmest advocacy. The inrush of immigrants has helped to keep the population divided into small groups of differing nationalities, and often of diverse languages. These and other causes have made the American city backward, as it may seem to critics of international viewpoint, in undertaking enterprises which require that practically the entire population shall act in harmony and unity. The racial situation has often helped to make local politics more partisan than patriotic. Lowell has not been exceptional in having periods of its history when it tended to become a city of discordant cliques rather than an organized social entity. It was, however, one of the first places to try to make democratic government genuinely responsible to itself under the commission form of administration.

Each decade finds the American city, despite its limitations, a better place to live in. Not only is there absolute improvement in opportunities for health, happiness and mutual helpfulness, but the standing of city life as compared with country life shows relative advancement. Not so many years ago it was currently believed, and perhaps with reason, that life in the open country was better for people than that in the crowded, noisy and often noisome town. The boy or girl brought up on the farm was seen to have had better training in

habits of industry and resourcefulness than the city-bred child. Even now, of course, many of the successes of business and professional life in the larger places are won by those who were born and bred on the land. Yet facts and figures accumulate to show that in many respects the modern city is overhauling the country—and, in at least some important features, already has overhauled it—as a focus of the advantages that make for well-rounded character. The health of children and adults is better in city than in country. The so-called fundamentals of education, together with other subjects of an enriched curriculum, are better taught in the urban graded schools than they ever were imparted in the little red school house. Men and women in the cities are better fed and better clad than those of the farming districts. The higher standards of personal morality, including sexual, that now prevail among most classes of Americans, to put it mildly, are quite as distinctly observable in the city and its immediate suburbs as they are in remote and thinly populated regions. Admitting all the charm and natural healthfulness of the country, one could wish the normal boy or girl no better fate than that of being reared in a good home of a modern city, preferably a place large enough to insure that educational and social facilities are of standard grade, and yet not so big but that the woods and fields are within easy reach. Such a city of pleasant and inspiring living conditions Lowell has been and is.

Only an optimistic outlook can result from accurate and sympathetic observation of the facts of the history and present situation of the normal American city. A survey of the community's successes and failures may yield material for more or less plausible jeremiads. Figures may be adduced which sound an alarm of the falling off of church attendance, the "race suicide" of the old American stock, of apparent increases in arrests for crime, or commitments on account of mental disorder. No social movement, however, is or ever was altogether upward. A balance must always be struck between losses and gains, and those who are closest to the facts of city life—such at least has been one writer's observation—are almost unanimous in finding that the advances quite outmeasure the retrogressions. That the Lowell which will celebrate the centenary of its incorporation as a town in 1926 will be a better as well as bigger community than it is to-day, seems as certain, in the light of observable tendencies, as that the present city is in many respects a more desirable place of residence than that which President Andrew Jackson, accompanied by several members of his cabinet, visited in 1833.

The reasonableness of the publication of another history of Lowell is evident at this time, if one considers the likelihood that the city is at the beginning of a new epoch. Twenty years have passed since the Courier-Citizen Company brought out its admirable volume

covering many aspects of the community's story from the earliest times onward. In two decades, much water has flown under Central Bridge. Much new material bearing on the old days has been amassed, some of it in manuscript, or in printed monographs that are not easily accessible to the general reader. The industries of the city have undergone considerable diversification. The historic form of government has been radically altered. The racial complexity has been increased. The interest of the outside world has been challenged by the preservation of a house in which one of the most celebrated of modern artists was born. Above all the quickening of the life of the place which was hastened by the outbreak of the European War, and still further accelerated when the United States entered the conflict, is likely to continue. It seems to be only a question of time when Lowell and the other cities of the Merrimack valley will be to all intents and purposes seaports. Through readiness of access to the sea-borne commerce of the world, Lowell will have overcome much of the handicap of its location in the extreme northeast corner of the United States. With new opportunities broadening out in every direction, it is visibly entering upon a period of expansion which may make it alike the metropolis of the Merrimack, and one of the large and model cities of North America.



CHAPTER II.

From Indian Town to Colonial Countryside.

Like most New England factory cities, Lowell is one in which the visitor is immediately conscious of the rivers on whose banks it has been built. Old-time villages were usually placed on high land; occupancy of valley sites became common only after the advent of the manufacturing era.

The Spindle City is peculiarly the gift of the Merrimack river and its tributary, the Concord, both streams of impressive pretensions. The Merrimack in especial, which, as school geographies used to say, "is utilized for more mill power than any other stream in the world," is felt, at this stretch of its course where it turns almost abruptly from its north and south direction toward the northeast, to be a river of unusual nobility and picturesqueness. The Pawtucket Falls, particularly when the river runs high, have a wildness that approaches grandeur. The long reaches of still water above and below the city have placid breadth. From the railroad train speeding from Lowell northward, the river gives a series of delightful glimpses from the moment it first comes into sight at Middlesex village. From the surface, as seen from canoe or motorboat, it has much of the aspect of a beautiful lake.

The complete story of the Merrimack and its confluent, from its rise in a tiny pond on the slopes of Mount Willey in the White mountains until it crosses the bar at Newburyport, does not belong to this narrative. It was told some half century ago in rather prolix and discursive fashion by J. H. Meader. Little need here be noted except that the stream has been celebrated in North American annals ever since Pierre du Gaust, Sieur de Monts and Samuel du Champlain, French explorers, on July 17, 1605, entered the bay where Newburyport now stands, and that as a source of supply of "white coal" it is still, as at all periods of history, one of the most favorably situated rivers of the continent in respect of rainfall, incline, storage opportunities and other advantages obvious to the hydraulic engineer. As it reaches Lowell it represents the run-off of territory that is almost ideal for useful ends as well as scenic charm. Central and Southern New Hampshire is a region of lakes, large and small, which serve as natural storage basins, regulating the flow of water in the river that drains the district. In the system are Lakes Winnepesaukee, Squam, Newfound, Pennacook, Masabesic, Baboosic, and almost innumerable smaller ponds. Some of these are directly controlled by the Locks and Canals Company. All of them help to promote an equable flow-

age. The drainage basin, amounting to 5,015 square miles, is a large one for a stream of the length, as one realizes in encountering confluents of the Nashua, one of the tributaries, in Central Massachusetts, or the headwaters of Baker's river, in territory that seems rightly to belong to the Connecticut valley.

The paramount mark of the Merrimack river for nearly a century past has been the industrial usefulness. Flowing through territory that was settled early, and presenting falls and rapids at many points which would naturally suggest easily available water power, the river has had a utilitarian history that might have been predicted a century and a half ago. It would have been strange, indeed, if the Anglo-Saxon enterprise that led to dotting the landscape with miniature mills along the Charles, the Neponset and the Mother brook within the Boston basin in the seventeenth and eighteenth centuries had not eventually moved upon the better chances of the bigger river, which, at its point of nearest approach, is only about twenty-five miles from the Shawmut peninsula.

The Merrimack—A word about the name of the chief waterway along which Lowell is built should be included. The Merrimack was not only discovered but named by the chronicler of the "Relations des Jesuits." Champlain adopted one of two very similar designations given to the river by different tribes of Indians. The aborigines of the north applied to the stream the title of "Merrimack," or "place of the strong current," from the basic words "merroh" (strong) and "awke" (a place). The Massachusetts aborigines, on the contrary, called it "Menomack," from "mena," meaning islands, "and awke" (a place). More or less confusion may have resulted from the similarity of those appellations. The spellings, especially before the Revolution, were many, and some of them extraordinary. A grant confirmed by Charles I. in the fourth year of his reign was to certain persons of a region thus described: "All that part of New England, in America, which lies and extends between a great river that is commonly called Monomack, alias Merrimack," etc. The following twenty orthographical modes were noted by the late James B. Francis in early records: Malamake, Maremake, Meremack, Meremacke, Meremak, Merimacke, Mermak, Merramack, Merramacke, Merremacke, Merremeck, Merri-mac, Merrimach, Merrimack, Merrimak, Merrimeek, Merrymacke, Monnomacke, Monomack, Monumach. On this subject of the spelling of the stream's name, it may be added, considerable acrimony existed for years between the up-river and down-river cities. Below Lawrence, people have long insisted on dropping the final "k," which Lowell, Nashua, Manchester and Concord have regarded as essential. Through the efforts of Congressman John Jacob Rogers, in 1914, the authority of the United States Government was invoked to declare the spelling preferred at Lowell to be the legal one.

While it is uncertain at what date wandering white men may have arrived at points in the Merrimack valley, it is well established, as brought out in a paper communicated by James Kimball to the historical collections of the Essex Institute, that an authorized exploration of the river was conducted in 1638, when the Massachusetts Bay Colony was hardly a decade old. This quest was undertaken in the interest of new homes for the throng of immigrants who were arriving during what is generally called the "great migration." "Within ten or twelve years," writes Mr. Kimball, "after the arrival of Endicott the colonists are represented as being straightened for want of land." Hubbard, in his history of New England confirms this statement, saying that Ipswich was so filled with inhabitants that many of them presently swarmed out to another place a little eastward. Because of numerous petitions for "farm lands," measures were taken to explore the Merrimack to the "extreme Northerly" line of the patent or charter granted to the Massachusetts Bay Company. In the colonial records appears this order:

Generall Court at Boston ordered: 6th 7mo., 1638.

Goodman Woodward Mr. John Stretton, with an Indian & two others appointed by the Magestrates of Ipswich, are to lay out the line 3 miles Northward of the most Northernmost part of Merrimack for w^{ch} they are to have 5 s. a day a piece.

These surveyors completed their work as far as the outlet of the Winnepesaukee, which they regarded the main confluent of the Merrimack, and at the Weirs they carved in a boulder the lettering which may still be seen:

W. P.
JOHN
ENDICVT
GOV

II

Jonathan Inch

These letters were disclosed in 1831 during a preliminary examination of the storage possibilities of Winnepesaukee basin. Within the memory of the present generation the rock was covered with the present canopy.

That the surveyors' work was satisfactorily achieved may be surmised from the following legislative resolve:

May 22d, 1639.

Goodman Woodward was ordered to have 3 £ for his journey to discover the running up on Merrimack; 10 s. more was added by order of the Gov. & Dep.

And they which went with him; Tho. Houlet, Sargent Jacob, Tho Clarke & John Manning to have 50 s. a peice &c.

Voyaging on the Merrimack must have yielded data about the river at a fairly early date. In 1635 there was published in London by William Wood a map which gave the general course of the river, locating Amoskeag, Pennacook, Pawtucket and an island called Wickassee. A description in the British Museum which gives the length of the stream as one hundred miles and states that in places it is ten miles broad, has some of the present Indian names.

The Concord River at Lowell—The chief tributary of the Merrimack in Massachusetts is the stream that drains the eastern part of a trough running across the State between the coast hills and the rugged plateau of the central district. This river shares with the larger water course into which it runs in economic responsibility for the city of Lowell.

An interesting river, on many counts, is the Concord, and to follow its meanderings from the spot where it is formed by the junction of the Sudbury and Assabet would involve much historical retrospect.

Like most of the rivers flowing northward in this terrain, the Concord is notably sluggish. It offers many camp sites, but relatively few water powers. An entertaining characterization of the Concord, now thronged with pleasure canoes from April to November, may be quoted from Meader, who wrote in the late sixties:

For fifty years past the true character of this remarkable stream was so little understood even by land owners along its borders that an almost continuous and very acrimonious legal controversy was maintained, which resulted in establishing the fact, by an able board of legislative commissioners, that the river was a very different thing from what they had all their lives supposed it to be. An inability to understand its true character had always prevailed. It had been an aggravating and expensive problem to some, and an insoluble mystery to others. The first blood of the Revolution, the blood of the intrepid and invincible yeomanry, mingled with its turbid waters at the Old North Bridge, and long years before it had been the haunt of the wary and stealthy barbarian, who, swooping down upon the exposed and defenceless settlers, enacted those atrocities which marked the advancing borders of civilization in New England, and makes the history of that epoch a yet existing terror. It was then called the Musketaquid or Meadow River, and it is the meadow river still,—a strong proof that the appropriateness of Indian designations need not be questioned, much less changed. If in some sense a river is a type of human life, this particular stream may be cited as symbolizing the actual career of many individuals known to those who may give the comparison a little reflection. How many there are who start off on the journey of life like this stream,—useless, idle and aimless, instead of becoming a wheel, a lever, an axle, a *something* in that complicated machine called society. The topography of the country is such, and the aspect of the stream so peculiar, as to warrant the supposition that it had repudiated natural laws, ignored the attraction of gravitation, and had taken its course over a gentle acclivity, which has the effect to get

itself repudiated in turn by those same laws, as it leaves its bank through every depression, and ruins much of the adjacent soil by the creation of swamps, marshes and lagoons. Thus it is with individual idleness, disfiguring the course of life with waste places, while the sedges, rank water-weeds and ugly filthy reptiles represent the vices, little and great, the fungi bred by indolence,—a parasitic growth.

The stream whose natural viciousness Mr. Meader thus eloquently exposed, breaks into belated activity at North Billerica, then lapses for a short time into slothfulness, and finally at Lowell "awakes to a realizing sense of duties, obligations and responsibilities at the eleventh hour, throws off the lethargy that has held it so long in chains, and, dashing over nearly two miles of picturesque and powerful falls, seems to seek, and with entire success, to compensate for its former vagrant life, and finally throws itself with alacrity into the Merrimack, leaving no space between the termination of its beneficent labors and its final doom."

A third stream which is included in any conspectus of the waterways making the conditions for a large manufacturing community in this locality is Beaver brook, a sizable river that drains a considerable area in Southern New Hampshire. It reaches the Merrimack at Lowell, though its principal water powers are in the town of Dracut.

The natural importance of the site on which a city was later to be upbuilt might have been foreseen by any observer of the seventeenth century who could have appreciated the change in men's ways of living that would be brought about by inventions of machinery and manufacturing processes. Down the narrow defile that definitely marks its turning to the northeast the Merrimack drops about thirty-four feet in less than a third of a mile. The rapids of the Concord represent a perpendicular fall of about twenty-five feet. As a further guarantee of power possibilities a survey would have developed the existence of two good manufacturing locations on Beaver brook, within three miles of its mouth, and of smaller powers on River Meadow brook, which flows into the Concord.

The advantageous character of the land in the neighborhood of the falls of these rivers, furthermore, should not have escaped the notice of a town planner of two and one-half centuries ago. From the present site of North Chelmsford southward the country is generally level and fertile to the junction of the rivers, though two small hills occur, one a short distance above Pawtucket Falls and one corresponding with the exact longitude of the falls. To the south the land rises gently into what is now the Highlands section of the city. A large tract extending from the foot of Pawtucket Falls to the tongue of land between the rivers is quite flat and by nature admirably suited for the layout of a town. East of the Concord are three moderate eleva-

tions, now the residential quarter of Belvidere, Fort Hill Park and the ground occupied by the Lowell cemetery. The portion of Dracut extending from the meadow lands nearly opposite North Chelmsford and down stream to and beyond the mouth of Beaver brook is level and tillable. Opposite the hill of Belvidere, from which it is separated by Hunt's Falls in the Merrimack, is Christian Hill, with more nearly precipitous slopes than any other of the neighborhood. Except that in very early settling the tendency was to place villages on hilltops and that the Indians had already preëmpted the opportunities for fishing at the falls, one might even have expected that a trading and industrial centre at this spot could be developed in early colonial times.

Wamesit—A capital city of the aborigines occupied the site of Lowell before the white man came. As the Rev. Mr. Miles wrote in 1846: "The place where the waters of the Merrimack and Concord rivers meet had a greater relative importance two hundred years ago than at any subsequent time prior to the introduction of cotton manufactures." As an ancient metropolis, indeed, of the American Indians this tongue of land has seemed to many writers to command more of attention and interest than as the later dwelling place of a few farmers in the colonial period. The stories of Passaconaway and Wannalancet and other natives of the neighborhood have been told and retold. Less, however, than might be wished is known of the historical origin and development of institutions among those Indian people; it is to be regretted that the English who first came into contact with the primitive culture at the falls of the rivers did not make a more accurate and voluminous record of the social, political and economic phases of their towns.

Two tribes, closely allied, the Pawtuckets and the Wamesits, had their chief villages within the present limits of Lowell in the middle seventeenth century, when pioneers from the white settlements at Boston and Salem first penetrated to the Merrimack valley. The composite community was accounted one of the two capitals of the Pennacook confederacy, representing an alliance of some of the most powerful tribes of New England. The fisheries at the falls were doubtless responsible in the first instance for the great congregation of red men in this district, for the bigness of the annual run of salmon, shad and alewives in the rivers is attested by many records. To the Indian these fish, which were most easily taken at falls, furnished not only food, but fertilizer for their crops of corn. Cowley, in his "Memories of the Indians and Pioneers of the Region of Lowell," refers with emphasis to the natural advantages of the place: "Next to the Falls of Amoskeag," he wrote, "the Falls of Pawtucket were the most noted for fishing facilities on the Merrimack river. The centrality and accessibility of its geographical position also added much to the

importance of the place. The upper Merrimack and the Musketaquid or Concord communicated with a vast region of the interior ; while the lower Merrimack afforded a safe and convenient channel to the seaboard."

Military considerations, also, it may be presumed, enhanced the importance of "Wamesit," as the English early learned to call the town. The Pawtuckets and Wamesits were of the class of aborigines known in native parlance as Nipmucks, or "fresh water folk," the derivation of the word being traceable from "nipe" (still water), and "auke" (a place). Accustomed to depend, in war and peace, upon the inland waterways as a system of travel and transportation they could not have chosen a better situated strategic centre than that where Lowell now is. Northward the Merrimack and its tributaries gave them connection with allied and friendly tribes, such as the Nashuas, Souhegans, Namoskeags and Winnepesaukee. A trip of a few miles up river and then *via* the Nashua toward the present town of Lancaster brought the Indian voyageur to the village of the Wachusetts. Down river, in Essex county, were their kinsmen, the Agawams. The Concord, then as to-day, an almost ideal stream for the canoeist, afforded, *via* a short portage to the Charles, a route into the region of the Massachusetts. With short carries, too, from the present site of North Billerica into the Shawsheen, and again near North Reading into the Ipswich, it was possible to make a quick journey to the ocean at Cape Ann. These waterways which now make pleasure trips for a few followers of the sport of canoeing must anciently have had great value as trade routes, and the focussing of several of them in the neighborhood of Pawtucket Falls was presumably a main factor in creating the capital of Wamesit.

No Indian community was large, of course, as adjudged by civilized standards. The land, under the aborigines' superficial system of cultivating only the natural clearings, could not support a heavy population. Among the Indian villages of this part of the continent, nevertheless, Wamesit had a population such as few white settlements of New England claimed in the seventeenth century. According to the estimate of Daniel Gookin, superintendent of Indian relations for the Massachusetts Bay Colony, the associated tribes of the confederacy numbered 12,000 people. The capital, he states, had a population of about 3,000 before the white man's scourges of disease, alcohol and gunpowder began to be operative. Of the metropolis on the Merrimack this ardent friend of the Indians wrote in 1674, just before the outbreak of King Philip's War :

The Pawtuckets are the last great Sachemship of Indians. Their country lyeth North & Northwest from the Massachusetts tribe, and whose dominion reacheth so far as the English jurisdiction or Colony

of Massachusetts doth now extend. They have under them several Sagamores, as those of the Pennacooks, Agawams, Naumkeeks, Pascataways, Accomintas and others. They were a considerable people heretofore—about three thousand men—and held amity with the Massachusetts tribe, but they were about destroyed by the great sickness that prevailed among Indians about 1612 and 1613, so that at this day they have not above two hundred and fifty men, besides women and children.

Present knowledge does not suffice to reconstruct with any degree of convincingness a picture of the life that was lived among the Wamesits whose wigwams were on the Concord and the Pawtuckets who had their habitations at the falls on the Merrimack that now bear their name. Most reconstructions of the kind are fanciful rather than genuinely imaginative. It is quite possible to sentimentalize the character of the Indians whose community, indeed, preceded the present city, and some writers, reviewing with indignation the story of the perfidy and cruelty of the many of the whites toward the natives, have attributed to the whole race of red men the utmost nobility of personality and sentiments. In point of fact, it may be assumed, the aborigines of this district had the virtues and vices of their breed—the identical qualities that may be observed to-day among the Indians of the western states, of Mexico and Central America. Gookin, their consistent and patient friend, had to admit that as a race they were incorrigible liars, that they were devoted to gambling, and that they were fond of violent dancing and boisterous revels with, no doubt, a plentiful accompaniment of strong liquor. Heredity, it may be added, probably inclined these sons of the forest to accept more readily the manners and morals of the underworld of Europe than the strait courses of the ruling class of the Puritan Commonwealth. Comparatively little, nevertheless, that is seriously discreditable to the Wamesits and Pawtuckets is of record; and most of the evidence at hand indicates that they were by nature a peaceable, affectionate folk who deserved a better fate than that which befell them.

Coming of the White Man—Just when a white man first reached the Indian wigwams at Wamesit and mingled with its inhabitants cannot be stated. Quite certainly before the adjoining village of Chelmsford was settled by solid church-going folk, the Indian town must have attracted some of the traders and wandering outcasts of whose relations with the natives one gets an occasional glimpse in the Bradford "History" and other literature. It is one of the surprises of investigation in this field that nearly every formal settlement was preceded by traders, squatters and fugitives from justice. Outside the pale of organized white society there seems to have been an element of immigrants who accepted the New World as a continent on which the restraints and customs of the Old World could be safely laid aside.

Of such sort, presumably, may have been seven whites who, according to tradition, lived among the Indians at the mouth of the Concord before the first English township was incorporated in the neighborhood.

The Pawtuckets at the beginning of authentic history in the neighborhood, were under the leadership of a very celebrated chief named Passaconaway, who was already an old man when the newly-arrived settlers on the coast became aware of his sachemship. This chieftain held sway at two capitals, one near the mouth of the Contocook, where the capital city of New Hampshire now is, and the other at Pawtucket Falls.

Passaconaway's name first appears in colonial records in 1629, when he sold to Rev. John Wheelwright and associates the territory extending from the Piscataqua to the Merrimack rivers and from the line of Massachusetts territory some thirty miles into the country. The deed conveying this land was signed with the marks of "Passaconaway, Sagamon of Pennacook; Runnawit, chief of Pawtucket; Wahangnonowit, chief of Squamscot, and Rowls, chief of Newichewannock."

Frequent as his contact with white people may have been, Passaconaway remains a somewhat shadowy figure in New England history. Instead of accurate observation of the manners and customs of the American Indian writers of seventeenth century New England, anxious to make a sensation among the home-staying folks in England, were prone to indulge in such characterizations as one in Wood's "New England Prospect" of the good leader of the Pawtuckets. "The Indians report of one Passaconnan," it is written, "that hee can make the water burne, the rocks move, the trees dance, metamorphize himself into a flaming man. Hee will do more, for in winter, when there are no green leaves to be got, hee will burne an old one into ashes, and, putting those into water, produce a new green leaf, which you shall not only see, but handle and carry away; and make of a dead snake-skin a living snake, both to be seen, felt and heard. This I write but upon the report of the Indians who confidently affirm stranger things." Equally sensational and analogous to the yellow journalism of to-day, is a description of Passaconaway given by Thomas Morton, of Merrymount fame. This imaginative chronicler declares:

That Papasiquinco, Sachem or Sagamore, is a Powow of great estimation amongst all kind of salvages. At their revels, which is a time when a great company of salvages meete from several parts of the country in amity with their neighbors, he hath advanced his honor in his feats of juggling tricks. Hee will endeavor to persuade the spectators that hee will goe under water to the further side of the river too broad for any man to undertake with a breath, which thing hee

performed by swimming over, and deluded the company with casting a mist before their eise that see him enter in and come out, but no part of the way hee has been scene.

Morton continues:

Likewise by our English in the heate of summer, to make ice appear in a bowle of faire water. First, having the water set before him he hath begun his incantations, and before the same has bin ended a thick cloud has darkened the aire, and on a sodaine a thunder-clap has been hearde, and in an instant he hath showed a prime piece of ice to floate in the middle of a bowle, which, doubtless, was done by the agility of Satan, his Consort.

Whatever devilish viles may have been attributed to Passaconaway, he appears never to have shown toward the colonists anything but pacific and conciliatory disposition. In 1632 he captured and delivered to Governor John Winthrop an Indian who had killed an English trader. Ten years later, at a time when there was widespread fear of an Indian conspiracy, the authorities at Boston sent some forty armed men to disarm the leader of the Pennacook confederacy. They failed to find Passaconaway, but arrested his son Wannalancet, his squaw and child. It might have been supposed that such treatment would enrage the chieftain. He held his temper, however, and presently he accepted an apology from the government for the indignities that had been put upon him. About 1660, when he thought the end of life was at hand (though he actually lived on for nine years more), he renounced his sachemship to Wannalancet in an address which, as reported by the English, has often been quoted. Counseling his people to seek and keep the friendship of the white man, the aged sachem is alleged to have said:

Hearken to the words of your father. I am an old oak that has withstood the storms of more than a hundred winters. Leaves and branches have been stripped from me by the winds and frosts. My eyes are dim. My limbs totter. I soon must fall. When young no one could bury the hatchet in a sapling before me. My arrows could pierce the deer at a hundred rods. No wigwam had so many furs, no pole had so many scalp locks as Passaconaway's. Then I delighted in war. The whoop of the Pennacooks was heard on the Mohawk, and no voice so loud as Passaconaway's. The scalps upon the pole in my wigwam told the story of Mohawks' suffering. The English came. They seized the lands. They followed upon my footpath. I made war upon them, but they fought with fire and thunder. My young men were swept down before me when no one was near them. I tried sorcery against them, but they still increased and prevailed over me and mine. I gave place to them and retired to my beautiful island, Naticook. I that can take the rattlesnake in my palm as I would a worm without harm, (I that have had communication with the great spirit, dreaming and awake), I am powerless before the palefaces.

These meadows they shall turn with the plough. These forests shall fall by the axe. The palefaces shall live upon your hunting grounds and make their villages upon your fishing places. The Great Spirit says this, and it must be so. We are few and powerless before them. We must bend before the storm. Peace with the white man is the command of the Great Spirit, and the wish, the last wish of Passaconaway.

The Wamesits and Their White Neighbors—The first resort of white men to the Indian villages of Wamesit and Pawtucket, as already suggested, was presumably on account of trade. Skins of beaver and other fur-bearing animals were an important factor in the commerce of the new colony. Before 1640 traders had ascended the Merrimack to Concord. It is a safe conjecture that the traffic with the Indians at the falls reached considerable proportions by the middle of the century, for its unregulated character attracted the notice of the governing class of the colony, and in 1657 Major Simon Willard and three others were granted, in consideration of a payment of £25, the exclusive right to trade with the Indians on the Merrimack river.

That, however, which most definitely brought Wamesit into history was the series of tireless efforts made by John Eliot and Daniel Gookin to replace the native culture with Christian habits and beliefs. Souvenirs of this missionary work remain in the nomenclature of the Lowell of to-day. No chapter of colonial annals is more creditable to the New England conscience at its best than this which covers the noble but unsuccessful plan of assimilating instead of extirpating the original owners of the country.

The Rev. John Eliot, of Roxbury, who, so far as known, first visited Pawtucket Falls in 1647 in company with Captain Willard, of Concord, and some Christian Indians, was then forty-three years old. Since about 1632 he had been carrying on his missionary labors among the Indians, of which his translation of Scriptures into their tongues is an extant witness. The propaganda continued until there were about ten thousand "praying Indians" in New England, descendants of whom may be found in the population of to-day.

After his first trip to the settlement at the falls, Eliot returned in the spring of 1648, finding "a great collection of Indians at this spot, a famous fishing place, and they furnished him with large audiences of Indians that came from various villages." Thenceforward, until disease and other causes practically destroyed the Wamesit community, this devoted preacher was the patron saint of "the fifth praying town," which rank it held. Years afterward, in 1687, shortly before the Apostle Eliot's death, Cotton Mather wrote: "There are six regular churches of baptised Indians in New England, and eighteen assemblies of catechumens professing the name of Christ. Of the Indians

there are twenty-four preachers of the word, and four English who preach the Gospel in the Indian tongue. Eliot did much for the Indians in and about Pawtucket Falls, where he preached to them and finally established a mission place and installed as pastor a native preacher named Samuel."

Major-General Daniel Gookin, who next to Eliot figures as the best friend and protector of the Pawtucket and Wamesit Indians, was an Englishman who had settled in Virginia before coming to New England. He took up residence in Cambridge in 1644. He was chosen to be captain of the local military company and was elected to the House of Deputies. In 1656 he was made superintendent of all Indians in the colony's jurisdiction. About this time he visited England and, as an authority on the Christianizing of the aborigines, received many attentions from Cromwell and other leaders of the Commonwealth.

The success of the missionaries at the falls was furthered by the friendly disposition of Wannalancet, son of Passaconaway, who succeeded to the sachemship of the Pennacook confederacy upon his father's abdication in 1660. This leader, one of the finest characters developed by his race, never in his long lifetime permitted the ill-treatment and indignities to which he was subjected to goad him into a hostile attitude toward the English. Some years after Eliot had begun to preach in the neighborhood, he announced his personal conversion to Christianity in a manner which was reported by Gookin as follows:

Here it may not be impertinent to give you the relation following: May 5th, 1674, according to our usual custom, Mr. Eliot and myself took our journey to Wamesit, or Pawtucket; and arriving there that evening, Mr. Eliot preached to as many of them as could be got together, out of Mat. xxii:1-14, the parable of the king's son. We met at the wigwam of one called Wannalancet, about two miles from the town, near Pawtucket falls, and bordering upon Merrimak river. This person Wannalancet, is the oldest son of old Passaconaway, the chiefest sachem of Pawtucket. He is of a sober and grave person, and of years, between fifty and sixty. He hath always been loving and friendly to the English. Many endeavours have been used several years to gain this sachem to embrace the christian religion; but he hath stood off from time to time and not yielded himself up personally, though for four years past he hath been willing to hear the word of God preached, and to keep the Sabbath. A great reason that hath kept him off, I conceive, hath been the indisposition and averseness of sundry of his chief men and relations to pray to God; which he saw would desert him, in case he turned christian. But at this time, May 6th, 1674, it pleased God so to influence and overcome his heart, that it being proposed to him to give his answer concerning praying to God, after some deliberation and serious pause he stood up, and made a speech to this effect:

SIRS:—You have been pleased for four years past, in your abundant love, to apply yourselves particularly unto me and my people, to exhort, press and persuade us to pray to God. I am very thankful to you for your pains. I must acknowledge, said he, I have, all my days, used to pass in an old canoe (alluding to his frequent custom to pass in a canoe upon the river), and now you exhort me to change and leave my old canoe, and embark on a new canoe, to which I have hitherto been unwilling; but now I yield myself up to your advice, and do engage to pray to God hereafter.

This his professed subjection was well pleasing to all that were present, of which there were some English persons of quality; as Mr. Richard Daniel, a gentleman that lived in Billerica about six miles off, and Lieutenant HENCHMAN, a neighbor at Chelmsford, besides brother Eliot and myself, with sundry others, English and Indians. Mr. Daniel, before named, desired brother Eliot to tell this sachem from him, that it may be, while he went in his old canoe, he passed in a quiet stream; but the end thereof was death and destruction to soul and body. But now he went into a new canoe, perhaps he would meet with storms and trials, but yet he should be encouraged to persevere, for the end of his voyage would be everlasting rest. Moreover, he and his people were exhorted by brother Eliot and myself, to go on and sanctify the sabbath, to hear the word, and use the means that God hath appointed, and encourage their hearts in the Lord their God. Since that time I hear this sachem doth persevere, and is a constant and diligent hearer of God's word, and sanctifieth the sabbath, though he doth travel to Wamesit meeting every sabbath which is above two miles; and though sundry of his people have deserted him since he subjected to the gospel, yet he continues and persists.

From records of eye-witnesses like the foregoing, and from traditions that have been handed down in families of the neighborhood, a fairly vivid picture of Eliot's mission among those peaceful Indians might be drawn. About 1653 a log chapel was built for the apostle on Meetinghouse Hill, believed to have been on the edge of the present South Common. This structure appears to have been used for a school on weekdays and as a church on the Lord's day. It is recorded to have been a story and one-half high, having an apartment for lodging the preacher during his stay. In it John Eliot conceivably may, as related, have entertained the Jesuit Father Gabriel Druillettes, who was undertaking among the Maine Indians a work of conversion not dissimilar to that of the Protestant missionary in the Bay State.

The work of teaching the natives to read and write was done by an Indian named Samuel. It was part of the colony's policy to substitute civil law for the supremacy of the sachems. Somewhere near the present Boott canal a native magistrate, John Numphow by name, who frequently figures in deeds and other records, held court in a log cabin.

The chapel in which John Eliot preached to the Indians remained *in situ* down to 1824, according to a statement made by Charles Cowley in an address delivered at the Eliot Congregational Church on



1. The Old Durkee House, located in Old Ferry Road near Pawtucket Boulevard. 2. Hildreth Homestead, near Hildreth St. and Aiken Ave., built in 1781. 3. The Tyler Homestead, in Middlesex Village, facing old muster field. 4. The Bowers House, Wood St., the oldest house in Lowell, built in 1686. 5. The "Glass" House, Princeton Boulevard, built in 1802, used for tenements by employees of the Glass Factory. 6. The Coburn Mission, Varnum Ave., built in 1755, first school building in Lowell.

October 31, 1897. Testimony to this effect was quoted: "Josiah G. Abbott, Oliver M. Whipple, Amos Brown and other 'Old Residents,' now no more, remembered it well, and there is one venerable gentleman still living, Mr. Sidney Davis, whose 82 years have all been spent in this place, who also remembers that log meeting house, having been nine years old when it was demolished."

Any notion that the treatment of the Indians by the governing class of Massachusetts Bay was at the outset hypocritical and cruel is probably contrary to the facts. There is abundant evidence of a widespread desire, which was cleverly stimulated by men of the missionary spirit like Eliot and Gookin, to do the right thing by this race. It was not then appreciated, just as down to now it rarely has been understood, how difficult is the transition from one culture level to another. It was hoped that superimposition of the institutions of Christian England upon the tribes of red men would make them Englishmen of a darker skin. The Great and General Court, at Eliot's initiative, took measures for encouragement of local self-government and instruction among the Indian communities. It was provided that in each village government should rest with a group of the "most powerful and most pious." The Indians might choose their own rules, though subject to approval by the general authority. There was to be a native marshal-general in charge of the praying towns—in the first instance Captain Josias, *alias* Pennahannit, whose place of residence was at Nashobah, now Littleton. To give the aborigines their proper place in the sun, the court enacted that the Indians had an original title to the land they held; that civil Indians should have lands granted to them for towns of their own; that Indians should not be dispossessed of land which they had subdued or be driven from their fishing places; that all strong liquors should be prohibited to be sold or given to Indians unless in case of sickness or by permission. It was not until after the hysteria excited by King Philip's War that the rulers of the Bay State were led into a different policy toward the aborigines.

Coming of White Settlers—The arrival of white settlers in considerable numbers in the vicinity of the Wamesits and Pawtuckets was only a question of a little time after a few families from Charlestown had laid the foundations of the present city of Woburn. The country beyond the rock rim that encloses the Boston basin is of a character to invite exploration. The divide that separates the headwaters of the Aberjona, a confluent of Boston harbor, and the Ipswich, is a barely perceptible elevation in South Wilmington. Prevailingly flat and sandy, the land extends into the Shawsheen territory and thence to the fertile meadows bordering the Concord. This is to-day an easy and inviting district to traverse on foot or on snowshoes.

It early attracted the adventurous from the settlements that already were forming to the north of Boston.

The first formal record of the Massachusetts Bay Colony's practical interest in the lands lying along the Merrimack appears in a commission which was given by the General Court to Captain Edward Johnson and Captain Simon Willard to explore the valley. In 1652 these hardy pioneers went up river beyond the fork at Franklin and discovered Lake Winnepesaukee.

Captain Johnson, author of "The Wonder Working Providence of Sion's Saviour in New England," was of Woburn, and it was presumably at his instance that some twenty persons of that township and of Cambridge in the same year petitioned the General Court for permission to look over, with a view to settling on it, lands about the junction of the Merrimack and Musketiquid (now the Concord) rivers. The privilege was granted and seekers evidently found the district promising, for on May 10, 1653, they asked the General Court for a grant of land six miles square, to the west of the Indian village and covering the present town of Chelmsford and parts of other townships. The request urged that "this land was a very comfortable place to accommodate a company of God's people, and that with God's blessing and assistance they may live comfortably upon and do good in that place for Church and Commonwealth." Several surnames that are still prominent in Lowell and the vicinity are noted in the list of petitioners, who were: Benjamin Butterfield, John Parker, Isaac Learned, James Parker, George Farley, James Chamberlin, Joseph Parker, John Hosmer, Jacob Parker, Henry Foster, William Chamberlain, John Nuttinge, Edmund Chamberlin, John Baldwinge, Richard Griffin, James Blood, John Smedley, Roger Draper, William Fletcher, Thomas Adams, William Hartwell, Robert Proctor, William Buttrick, Baptist Smedley, Richard Hildreth, Thomas Briggam, Daniel Blodgett, John Hall, William Hall. Their plea was made simultaneously with a request from John Eliot, ever alert to the interests of his proteges, that a suitable reservation of land be made for the Indians living in the vicinity of Wamesit and Pawtucket Falls. Both petitions were granted on May 18, 1653.

In its decree the General Court granted to the English petitioners the land they asked for "excepting some part of it joyning to Merremacke River," which, of course, was reserved for occupancy by the Indians. It was also "provided, that the said peticoners shall sufficiently breake up full so much land for the Indjans in such place as they shall appointe with in such plantacon as shall there be appointed them, as they have of planting ground about a hill called Robbins Hill, and that the Indjans shall have use of theree planting ground afore-

sajd, free of all damages, vntil the peticoners shall have broken vp the land for the Indians as aforesjad." Captains Willard and Johnson were appointed to lay out the bounds. It was provided that if the petitioners did not "within two years, setle a competent noubner of familjes there, by building and planting vppon the said tract of land twenty familjes or vpwards so as they may be in capacitje of injoying all the ordnances of God there, then the graunt to be voj'd."

The conditions of the act were duly met, even though several of the petitioners never took up their grants. A plan of the newly planned settlement exists among the Massachusetts Archives. It shows that the Indians of Wamesit and Pawtucket were confined to a small triangle between the two rivers, extending from about North Billerica over to the Merrimack above Pawtucket Falls. A small tract of good corn land, where Middlesex Village now is, was assigned specially to "John Sagamore." The English territory stretched from the southern and western part of the city of Lowell over the townships of Chelmsford and Westford toward "Grautten."

Into this district of attractive hilly country came settlers enough, so that on May 29, 1655, the General Court felt itself justified in decreeing: "Uppon informacon from Major Willad, by a letter from Esdra Rand, Edward Spalden, Wm. Fletcher, etc., inhabitants of a new plantacon, that the noubner of inhabitants, according to the time fixt in the Courts graunt, were there settled at there request, the Court doth graunt the name thereof to be called Chelmsford."

The precise reason for naming the new township after the county town of the English Essex is not positively known. There is some plausibility in a statement made years afterward by President John Adams, who had relatives in the town, to the effect that "Chelmsford was probably named in compliment to Mr. Hooker, who was once minister of that town in England." Certain it is, according to the biographical sketch of Thomas Hooker in the Dictionary of National Biography, that the famous Puritan divine in 1626 accepted a lectureship at Chelmsford, where he made himself especially popular with the younger clergy, "to whom he was an oracle and their principal library." It is not known that any of the original settlers were from Chelmsford.

Thus was founded, with its principal centre about three miles from the Indian villages, the town under whose government was the major portion of the lands comprised in Lowell, down through the colonial era and until the partition of a separate township in 1826.

The conventional, and perhaps essentially correct, account of the attitude of the new settlers toward their Indian neighbors appears in one of the chapters of John Greenleaf Whittier's "The Stranger in Lowell," in the following phraseology:

The white visitants from Concord and Woburn, pleased with the appearance of the place, and the prospect it afforded for planting and fishing, petitioned the General Court for a grant of the entire tract of land now embraced in the limits of Lowell and Chelmsford. They made no account whatever of the rights of the poor Patuckets; but, considering it "a comfortable place to accommodate God's people upon," were doubtless prepared to deal with the heathen inhabitants as Joshua, the son of Nun, did with the Jebuzites and Perizzites, the Hivites and the Hittites of old. The Indians, however, found a friend in the apostle Eliot, who presented a petition in their behalf, that the lands lying around the Patucket and Wamesit Falls should be appropriated exclusively for their benefit and use. The Court granted the petition of the whites, with the exception of the tract in the angle of the two rivers on which the Patuckets were settled.

The actual terms in which the nearby Indian reservation was surveyed and described a few years later by Danforth in 1664, are as follows:

There is laid out unto the Indians, who are the inhabitants of Waymesick, five hundred acres of land on the east side of Concord River and joyning to the said river about one mile & three quarters, which reacheth to Bacon Brooke, & bounded by the said brooke on the south fower score poole; it runnes from the mouth of Concord Ryver downe Merremacke River two hundred & fifty poole, where it is bounded by a red oake marked; from thence it runnes according to the bound marke trees with two angles, unto Bacon Brooke; all which doe more plainly appeare by plott of it.

This five hundred acres is part of that three thousand wh^{ch} was layd out to Mrs. Winthrop formerly.

Following the settlement of the Rev. Mr. Fisk in the new town came a considerable migration of families from the community which he had just left. The wealth and solidity of the Wenham newcomers is said by Wilkes Allen, the first Chelmsford historian, to have meant much to the frontier town. One of the foremost of these accessions was Deacon Cornelius Waldo, a man of means and native leadership. Another who figures largely in narratives of the time was Major Thomas Hinchman, whose residence in the Middlesex village district makes him one of the indubitable fathers of the city of Lowell. Deacon Abram Spalding appears also to have been of the Wenham accession.

Billerica as a Parent Town of Lowell—The town of Billerica, which later, through its northern sub-division of Tewksbury, was to contribute to the territory of Lowell, was simultaneously in process of establishment. Its domain was part of a large grant made in 1640 to Margaret Winthrop, wife of Governor John Winthrop, "our late Governor, to be at her dispensing, for her and her sonns, when they shall desire it without pudice to any former grant."

In this tract, then known as "Shawshin" and extending from the Concord river down the Shawsheen through Andover, settlers had begun to take up locations and, evidently, to crave a definite legal status, for they petitioned in 1655 for a grant of the land upon Concord river, to extend to Pawtucket, in other words to include the parts of Lowell, now south and east of the Concord. To their petition the Legislature on May 23, 1655, gave assent, with certain qualifications in the following terms:

In answer to the petition of the inhabitants of Shawshin for a pcell of land lying vpon Concord River side to Pawtucket this Court think meet to grant their request; *viz.*, the tract of land mentioned in their pet. if no former graunt be made to any other, & that the name of the place be called Billicary: & whereas there is a motion made, that the next president may haue a farme of the fiae hundred acors in this place, the Court doe not consent thereto, as concerning it to be very pjudiciall to the plantation, but are willing to graunt it in some other place, where it may be found according to law, pvided the psident con-
tinue in that place three years.

Five days later a town was incorporated in accordance with the following act:

In ansr to the peticon of seurall proprietors & inhabitants of Shawshin humbly desiring a tract of land lying nere the line of the farme of John and Robert Blood, & so along by the side of Concord Riuer, &c., the Court graunts the name of the plantacon to be called Billirikeyca.

Determination of rights of heirs of Margaret Winthrop in this territory made much trouble for some decades to come, with intricacies of title that have no place in a narrative history.

The name of Billerica, given to this township created on the southern portion of the Winthrop grant, is an Americanization of Bilericay in Essex. The origin of the curious word is undetermined, one antiquary suggesting that it is from the Latin Belleri-castra. Ralph Hill and William French, pioneers of the town, whose descendants figure extensively in Lowell history, are believed to have come from the English Bilericay.

The first surveys of this neighborhood, as appears in the foregoing determination and in others, were made by Jonathan Danforth, who was born in High Suffolk, England, in 1628. Many of his carefully made "plots" are treasured in the State Archives. In Billerica he held the offices of selectman, representative in the Legislature and captain of the militia.

The rapidity with which the countryside now filled up with English-speaking people must have surprised Wannalancet and his Indian compatriots.

From about 1655 the neighborhood began to assume the aspect of a collection of civilized communities. At Chelmsford Centre the apparatus of political and religious life was in existence from the date of the first town meeting, which was held November 22, 1654, at the house of William Fletcher. It was then arranged to entrust the government of the town to a committee consisting of Esdras Read, Edward Spaulding, William Fletcher, Isaac Lerner, Simon Thompson, William Underwood and Thomas Adams. Provision was made at the same time for entertaining the new minister-elect, the Rev. Mr. Fisk, of Wenham, under the following terms: "We give to Mr. Fisk Thirty acres of meadow and Thirty Acres of Plowable Land for the accommodation of him for his most convenience: And we do agree and Order that he shall have a house built for him Thirty-eight foot in length & Twenty foot in breadth, with three fire Rooms, the Chimneys built with Brick or Stone; and we promise to pay to Mr. Fisk, Fifty Pounds for the first year; and we promise to pay his maintenance as the Lord shall enable us for the future." This minister, a graduate of Immanuel College, Cambridge, a trained physician as well as clergyman, whose service lasted for twenty years, is described as "a plain but an able and useful preacher of the gospel; rarely if ever, by sickness, hindered from the exercises of his ministry." Details of his ministry belong, of course, to the story of Chelmsford, which Rev. Wilson Waters has told with fascinating fullness of detail.

Amidst these favoring circumstances farms were taken up in every direction about the Indian reservations. Trails became highways and soon there was a beginning of the diversification of industry which has been marked in this district down to the present town. A grant of thirty acres of fine land to one William How, a weaver, on condition that he set up an establishment to ply his trade, was one of the first instances in New England history of the subsidizing of a local manufacture.

Highways and Bridges—Road-building is shown by the Chelmsford records to have been active in the first decades of the settlement. In January, 1659, appears the earliest account of a permanent highway in the town: "George Biam and Thomas Barrett are appointed a committee to state the High-way that goes to Tadmuck [in the extreme western part of the grant] before Thomas Chamberlain's house. The tree at his Hog's Coat is concluded one bound, and so to Run his due breadth according to order, towards the Brook, Cold Beaver Brook." Soon after this the "road to the bay" was begun. The latter brought Groton and Chelmsford into touch with Boston by way of Billerica. The "country way to Merrimack" was one which came into the present city limits. It seems to have been begun in 1659, starting at the town farm and running over the Golden Cove and Carolina

Plain to Middlesex Village. The record shows that in 1673 it was extended to the river, following what is now Baldwin street. A report on the surveying of this highway is as follows: "William Underwood, William Fletcher and Abraham Parker being appointed a committee to Lay out a highway for the Inhabitants on the other side of Meremack do Determine that it shall begin at the Country way at poor man's bridge, and so along between the two swamps and over William Underwood's Meadow, all being bounded by marked trees on both sides: and so Runeth below Mr. Hinchman's dam; and so to the Indian line to answer the Country Road at Merrimack and on this side."

The Billerica people, too, were industrious road-builders. From 1659 onward the way to Wamesit from the English settlement at North Billerica must have been better than an Indian trail, for in that year, according to the Book of Grants (I, 164), quoted by Haven, the colonists extended a road toward the Merrimack. The exact lines followed by this highway are with difficulty determined in the involved phraseology of the day.

The incidents which have come down concerning the first important bridge in this neighborhood throw a little light on the problems of opening lines of communication between the scattered settlements. The nature of the deep and sluggish Concord river rendered the problem of bridges one which must be faced early in the history of Chelmsford, Dunstable, Groton and other towns of what was the frontier in the middle and late seventeenth century. Communication with the provincial capital at Boston required that riders and drivers should not have to depend on fords which were liable to be impassable in high water.

In view of the present distribution of population one might have expected the first bridge to be built at one of the narrow places of the last two miles of the river's course where it drops into the Merrimack. Such a route, however, would not have followed the most direct line between the new villages of Billerica and Chelmsford centre, and it would have had the disadvantage of passing through the Indian settlement at Wamesit. The bridging of the river, accordingly, occurred just above North Billerica, where the present name of Fordway Bridge commemorates an entertaining series of events of the old days.

The earliest official intimation that such a bridge ought to be built seems to have occurred in May, 1657, when it was urged in the General Court that public convenience and safety required the construction of bridges over the Mystic and Concord rivers. Action seems to have been taken in Billerica very shortly thereafter, for a bridge at the Fordway was certainly in use in 1659.

The primitive structure quite likely was not so very substantial,

for in 1660 it was repaired by Ralph Hill, Jr., and James Kidder, and in 1662 further repairs were needed. For this latter work Billerica, it is recorded, furnished five workers, Chelmsford four; on daily wage of 2s., 6d., with an additional charge of 14 shillings for liquor for the crew. The last-named item may have interfered with sound craftsmanship, for only two years later complaint was taken to the General Court of "great defect in Chelmsford Bridge." A loss of temper between the two towns immediately concerned appears to have followed upon the frequent demands for labor and money to patch up the bridge. The following minute is found in the Billerica town records, dated January 12, 1666: "Whereas the selectmen of Chelmsford (by writing under ther hand) have declared (to the selectmen of Billerica) their absolute refusall any longer to assist in maintenance of the great Bridge upon Billerica river, as also giving Notice to them to repair the same acording to law. Hence the selectmen of Billerica (for ye preventing of dangers and hazards by travelers) do order that some of the planks of that bridge be taken away, that so there may be no passing over it; and some provision made on each side the breach to give warning of the danger to any traveler."

Whether an impassable condition thus created greeted the wayfarer for the next year and a half is not certain. The case clearly acquired notoriety, for on October 9, 1667, the General Court intervened with an order "that the sajd bridge shall be repayred & upholden by the townes of Billerica, Chelmsford & Groaten, and all such farmes as are there granted," these towns to be free of maintenance of all other bridges "except in their own bounds." To carry out its decree the Legislature appointed a committee consisting of John Webb, *alias* Evered, Thomas Hinksman (Henchman), James Parker and Jonathan Danforth "to agree with some able and honest artificer for erecting a bridge over Billerica River as speedily as may be."

The professional contractor who was expected to succeed where amateur tinkerers had failed was Job Lane, an artificer "who had already achieved fame as builder of the college halls at Cambridge." With him a contract was made on January 11, 1667, for work to be finished on or before September 29, of that year. The plan called for arches of sixteen-foot span. The flooring of the bridge was to be of oak planks four inches thick. The payments, representing doubtless a very large sum in proportion to the financial ability of the towns concerned, aggregated "seven score and five pounds starling," of which the artificer was to receive ten pounds in cash, ten in wheat, ten in malt, and the remainder in corn and cattle, "not exceeding one-half in cattle which shall be under seven years old." The bridge, undertaken under these auspices, was, so far as known, completed in the specified time. It may be doubted, however, if even the skillful Job Lane was

able to give complete satisfaction, for a few years later, specifically in 1676, complaints were renewed, and the towns were again put to expense for repairs. After that year came two decades in which the bridge is not mentioned in existing records and then, in 1696, a flood swept it away. The rebuilding took place in 1698 at a point somewhat further upstream. Groton refused to pay its share in this reconstruction until so ordered by the General Court. The resultant structure lasted until 1737 when it fell down and had to be rebuilt.

Such were the difficulties of keeping open a line of communication between the Merrimack and Boston harbor in colonial days. The assessment of charges for this bridge upon the beneficiary towns was a subject for constant contention. On May 22, 1738, for example, the town of Dracut voted to pay to John Varnum the sum of six pounds "for his servis and Expenses In Gitting the Town free from Charg of Billirica Bridg." That such policy of obstruction was short-sighted may be argued in a generation which is used to seeing taxes for a special improvement spread over all the area affected. It is tolerably clear, as Major Atkinson Varnum says in his history of Dracut, that the Billerica bridge was an economic necessity of the whole district. The volume of teaming, indeed, that developed as the country became populous is hard for the person accustomed to railroad transportation of freight to appreciate. One little item in Mr. Varnum's exposition indicates the magnitude of the traffic that rolled over Billerica Bridge: "A substantial team of horses was required to transport the New England rum alone required by the country merchants in Chelmsford, Dracut and the neighboring towns."

Early East Chelmsford Settlers—The mode of living in the settlement that during the third quarter of the seventeenth century grew up alongside the ancient Indian metropolis has been illustrated with abundant citations from old records in Perham and Waters' history of Chelmsford. Of the settlers whose homesteads were planted within the bounds covered by the present study relatively little is known, except of those who in some official capacity or other had dealings with the Indians. Of such sort were Thomas Henchman; the brothers Richardson, Captain Josiah and Lieutenant James, and the eccentric trader, the first temporary settler, so far as known, north of the Merrimack, John Evered, *alias* Webb.

Henchman, whose name appears frequently in records of orders from the General Court with regard to the Indians, is recorded with Captain Jonathan Tyng, who had settled in the part of Dunstable that is now Tyngsborough, as one of the principal men of the region. He came originally from Wenham. The Legislature relied upon him for local leadership in the distressing times of 1676 and thereabouts. His

name has not been handed down among descendants resident in Lowell.

The Fletcher family, long prominent in this district, whose name is perpetuated in Fletcher street, originated with Lieutenant William Fletcher, of Concord and Chelmsford, born in 1624 and died in 1677. He was an ensign under Lieutenant Hinchman and was elected to the committee of militia of the town of Chelmsford, February 15, 1676, to report to the general court at Boston the alarming situation with regard to the Indian outrages and depredations.

One who settled at a very early date in Middlesex Village, and who probably may be called the first Lowell manufacturer, was Captain Jerathmeel Bowers, whose name is encountered frequently in the older records. He was a son of George Bowers, who was a resident of Cambridge. His brother, Benannel Bowers, married Elizabeth Dunster, daughter of President Henry Dunster, of Harvard College, and resided in Charlestown. Descendants of Captain Bowers have played and are playing an honorable part in Lowell history. Their progenitor's occupation was one which was in honor in his day. He conducted a distillery.

The many Richardson descendants in and around Lowell trace their origin for the most part to the brothers just mentioned, who were sons of Ezekiel Richardson, a fellow-passenger with Governor Winthrop in 1630, and one of the original settlers of Woburn in 1640-42. The sons were among the foremost of the early Chelmsford settlers. Lieutenant James, through his having charge of the Wamesit Indians, was a resident of pre-urban Lowell. The former brother became a property owner in the heart of the city, when in June, 1688-89, the Indians, "from the love they bore to Josiah Richardson," conveyed to him a parcel of land at the confluence of the two rivers and extending southward to a stream then called Speen's brook. The record indicates that these brothers were exemplary citizens. Captain Josiah, especially, held many offices of honor and responsibility: Fence viewer, 1659; committee to consult with Groton for laying out a highway, 1662-63; constable, 1667; selectman, 1668-82; town clerk, 1690-94.

A word should be said about John Evered, *alias* Webb, the somewhat strange man who, though he did not remain or leave descendants in this region, was probably the first white man to live, even temporarily, in Lowell north of the Merrimack. This trader with the red men was born at Marlborough, Wiltshire. He was in Boston as early as February, 1634. Two years later he was made a freeman. As a merchant he conducted a store for some years on the corner of Washington and School streets, later occupied by the Old Corner Bookstore. About 1650 he came to Chelmsford to traffic with the Indians and to assist in locating land grants. His name appears as ensign

and captain of the Chelmsford military company. In 1659 with three of his military associates, he was granted a tract of 1,000 acres of land on the north side of the river. Evered, who for some unknown reason, liked also to be known as Webb, soon bought out his associates and personally moved over to the lands opposite Middlesex and North Chelmsford, which lands he called "Drawcott," presumably after some place with which he was familiar in England. The Indian name of this district, as appears from a deed of 1667 owned by Joseph Bradley Varnum Coburn, was Augomtoosooke.

Later Evered had another grant of five hundred acres east of Beaver Brook and several other grants on both sides of the river, his total proprietorship exceeding 3,000 acres. In 1664 he sold one-half of his original purchase to Richard Shatswell and Samuel Varnum, of Ipswich.

Webb returned in 1668 to Boston, where he was drowned in the harbor while engaged with others in chasing a whale that had come close to shore. The mode of his death is thus described by the Rev. Samuel Danforth, of Roxbury: "17th 8th month 1668 Mr. John Webb, *alias* Evered was drowned catching a whale below the Castle. In coiling ye line unadvisedly he did it about his middle, thinking the whale had been dead; but suddenly Shee gave a Spring and drew him out of the boat. He being in the midst of the line but could not be recovered while he had any life."

Beginnings of Dracut—The colonial records mention four early grants of land in the present township of Dracut and of Lowell north of the river to as many individuals: 1. A grant of the year 1650, 3,000 acres to Robert Saltonstall. 2. Some 1,600 acres on the north of the river and east of Beaver Brook, granted in 1659 to Richard Russell. 3. In 1660, 250 acres lying northwest of Russell's grant to Edward Tyng. 4. Five hundred acres lying opposite the mouth of the Concord river to one Symmes. None of these grantees, so far as known, ever took possession. After the settlement of Chelmsford four men took up land in the upper or west end of Dracut, that is in the part that is now the Pawtucketville district of Lowell. These were Scarlet, Webb, Setchel and Hinksman (or Henchman, first mentioned), each with lots running back from the river. Scarlet brook, which runs into the Merri-mack opposite North Chelmsford, bears the name of one of these proprietors. Webb, as elsewhere stated, is known to have built a shanty and to have occupied it. This building is said later to have been burned by Indians.

The locations of these grants were established in a study which George A. Gordon, genealogist and antiquary, read before the Old Residents' Historical Association in August, 1892. The facts essential to this history were as follows:

A considerable portion of Lowell, skirting the northern shore of the Merrimack was thus granted [by the Massachusetts General Court]. The boulevard, reaching from two little brooks above Pawtucket, or near the inlet to the Water Works' gallery, to opposite Tyng's Island, was granted, three and a quarter miles on the river front, and roughly estimated at a thousand acres, to Captain Oliver, Lieutenant Johnson, and Ensign Webb, of the Boston A. & H. A. Six hundred acres next above was granted to Richard Dummer. Beyond the military grant, and stretching to the pond, was a grant to the town of Billerica. From the Falls to Beaver Brook was reserved to the Indians that they might have full opportunity to fish. On the east side of Beaver Brook, and extending to the western slope of Dracut Heights [now Centralville] sixteen hundred acres were granted to Richard Russell, treasurer of the Colony, to be accounted as part of an earlier grant to Sir Richard Saltonstall. Next to this, and up the brook, six hundred acres were granted the town of Billerica. Two hundred and fifty acres, still farther north, and embracing the present Winter Hill or New Boston, was granted the father of Colonel Tyng, as a farm. Between which and Beaver Brook to the northwest two hundred acres were granted to Roger Conant. Below this last, and covering the present Collinsville, lay a grant of five hundred acres to Capt. John Webb. On the west side of the brook and above the Billerica grant, next Double Brook, lay a gratuity of two hundred and fifty acres to Edmond Batter, a deputy from Salem. Dracut Heights, then undesirable in land riches, was ungranted; but down the river and west of the brook, where to-day local fishermen catch trout, was located a grant of five hundred acres to Samuel Simonds, deputy governor, which, becoming the property of Deane Winthrop, has always been known as the Winthrop farm. The Higginson grant of seven hundred acres was at the extreme limit of Dracut bounds, and ultimately withdrawn across the line.

To follow all the subsequent combinations of these original grants would be unprofitable unless in settlement of some legal question. In 1701, when the settlement of Dracut was recognized as a town, a committee of the Legislature apportioned a division of its soil among the actual inhabitants. The titles thus established are recorded in a manuscript volume which is still preserved at the office of the town clerk and selectmen and which is the basis of most of the present ownership in Lowell north of the river.

A reference, cited above, to the needs of "Inhabitants on the other side of Meremack" proves that by 1673 the then unorganized district which later became the town of Dracut was acquiring a population such that the town authorities of Chelmsford had to consider it in their planning. On the fertile meadow lands that border Clay Pit Brook and the Merrimack River, opposite Middlesex Village, Edward Colburn, or Coburn, believed to have been the first permanent white dweller in "ye wilderness on ye Northerne side of Merrimac River," had placed his habitation. He was not, apparently, the earliest to cul-

tivate land on this side of the stream, for some time previously Samuel Varnum had purchased a holding over the river, but on account of the danger of raids from hostile Indians had lived on the Chelmsford side, crossing to his farm in a boat.

The settlement which thus sprung up in what is now the Pawtucketville section of the city of Lowell was destined to be during the entire eighteenth century the most considerable community within the existing municipal boundaries. While "Wamesit Neck" was still simply a "farm end" of Chelmsford, the parish at Dracut at the head of Pawtucket Falls was one with a vigorous religious and secular life of its own. Here are several of the oldest houses in the city. In the town records, now kept at Dracut centre, are many entries that throw light on present-day inheritances.

As a community West Dracut was remarkable, among other things, for the prominence of the two families whose progenitors were its first settlers—the Varnums and Coburns.

Samuel Varnum, who was a resident of Middlesex Village before he moved over the river, is believed to have lived somewhere about the mouth of Black Brook. He was a son of George Varnum, who settled in Ipswich about 1635. In this town, too, as it happened, was resident Edward Colburn. Thus from very early days of the Massachusetts Bay colony were associated these two families, very much intermarried, both of whom are intimately connected with the development of the Lowell neighborhood. There is a tradition to the effect that both came from the same place in England, but this has no substantiation in any data yet discovered. To George Varnum has been attributed residence in one of three or four English "Draycotts." Since, however, John Webb appears to have first applied the name, this tradition is probably a fiction.

It is established, at all events, that Samuel Varnum was born in England in 1619, for in 1683 he made a deposition in which he gave his age as sixty-four. Several facts about his residence in Ipswich have been unearthed by the Varnum genealogists. His marriage to Sarah Langton, of that town, took place about 1645, and there his children, five sons and a daughter, were born. The original grant to him of 1,100 acres of land "in Drawcott, on Merrimacke River," was made on January 16, 1664. Richard Shatswell, who received a large grant at the same time, never became a settler in this neighborhood, selling his land on October 7, 1669, to Thomas Henchman, who conveyed it to Edward Coburn, November 22, 1671.

While, probably, Samuel Varnum was still living on the south side of the river, events occurred that must be accorded notice.

The first white child to be born in Lowell, so far as known, was John Varnum, who saw the light October 25, 1669. His grandson,

Parker Varnum, in memoirs written early in the nineteenth century, refers to a family tradition, which is probable enough, that the mother was assisted at childbirth by Indian squaws of the neighborhood who were greatly rejoiced at the appearance of a "white pappoose."

Supplementary notes on Edward Colburn, or Coburn (the name being spelled in eleven different ways in colonial records) may be given. He is believed to have been the Edward Colburn who arrived from London at Boston in the ship "Defense," Captain Bostock, in October, 1635. On the same ship was Robert Colburn, presumably an elder brother, ancestor of the Colburns, of Dedham. This younger emigrant, whose age was stated as seventeen, a few years later was listed as "Nathaniel Saltonstall's farmer" in Ipswich.

It is inferred by the compilers of the Coburn genealogy that during his residence in the North Shore town in which the Saltonstalls, Richard and his son Nathaniel, were leading people, Edward Colburn owned no land and that as his family grew up around him he determined to better his condition. It has also been plausibly urged that at about this time the removal of several Wenham residents to Chelmsford, whither the Rev. Mr. Fisk had already gone, may have turned the attention of Ipswich residents to the fertile lands of the Merrimack valley.

Edward Colburn's wife is known to have been named Hannah. Her maiden name is unknown—perhaps because the Ipswich town records were burned in 1831. His nine children were: Edward (1642-1675); John (1644-1695); Robert (1646-1701); Thomas (1648-1728); Daniel (1654-1712); Hannah (1656—); Ezra (1658-1739); Joseph (1661-1733); Lydia (1666—). This ample progeny of stalwart sons received allotments of land in the parts of Dracut which the father had acquired, each receiving a lot that bordered on the river. To John in 1671 was deeded one-eighth of the holding bought from John Evered, "right against the new barn bounded by Robert on both sides, the river south and highway north, reserving one-half acre about the new barn with convenient highway to new barn." The son did not receive this property as a gift, for he agreed to pay his father £55 sterling, in annual installments of £5. Deeds of property to other sons are on record, the latest being one of date 1690 to Joseph, who apparently had been selected to care for his parents in their later years. "For divers causes me thereunto moving," wrote Edward Colburn, "especially in consideration of that care to provide for me and for my dear wife so long as it shall please God to continue both or either of us in this life I do convey unto my son Joseph Colburn my old dwelling house in Said Dracut and upon my farm thereon, which was the Garrison House, and which he is actually possessed of. Together with a half part of my lot of land to said house adjoining to the land

of my son Ezra Coburn, the said land lying northeast and up the river. It is the half part of that latter field which is commonly called the Barn Field." The reference to the Garrison House in the deed just cited raises a problem of antiquarian interest. Mrs. Griffin, in her chapter on "Old Homes and Byways," attributes to the first Pawtucketville settler the erection of the famous Garrison House near the navy yard which was razed not so many years ago during Major Henry Emery's ownership of the property. "It was built about 1669," she states, "by Edward Colburn as a place of protection for the early settlers against the hostile Indians." Others, as for instance the author of the Lowell Courier-Citizen history, have identified this fine old house with the overhanging story, upper story, with a fort which by order of the Governor and Council of the Commonwealth, was erected in 1676 and placed in command of Lieutenant Thomas Hinchman. Quite a different location is assigned to the original Garrison House by Major-General Philip Reade, a descendant of Edward Colburn, who places it on Varnum avenue, near Totman street. As quoted in the Coburn genealogy General Reade says:

As Edward was the first settler north of the Merrimack it was necessary to provide against the assaults of the Indians. They roamed through the woods and paddled their canoes on the river, and the lives of the white settlers were of no value to them. He erected a Garrison House, and, with his seven stalwart sons and his sons-in-law, he was able to protect himself from thieving bands of Indians, while aid could be summoned in time of danger, when larger bands would be on the warpath. His Garrison House he left in his will to his son, Joseph, and there can be no doubt that it is still standing. On Varnum Avenue, nearly opposite Totman Road, is a two-story house, which for many generations was the home of the Coburns. The last to occupy it was Nathaniel B. and his sons, Edmund, Howard and Walter [of the eighth generation], and it passed out of the ownership of the Coburns. It had been known as the Garrison House for five generations, and the size of the timbers, the low posted rooms and the style of building, all furnish evidence of its age. It has been remodeled, and changed by additions and demolition until but little of the original building can be found. The earlier settlers had no motive for calling it the Garrison House, unless it was one, and the later generations would not have originated the name, all of which proves it to be Edward Coburn's Garrison House.

If this contention of General Reade's is correct it is quite possible that the house he mentions in Pawtucketville, and not, as has been stated, the Sewall Bowers House on Wood street, is the oldest dwelling now standing within the limits of the city of Lowell. As for the Garrison House on the Navy Yard road, this may or may not come under the general scepticism with which present-day antiquaries regard the numerous "garrison houses" of New England, most of

which had the overhang not for any reasons of protection but because that was a typical form of Jacobean house, brought from England. The Navy Yard house was certainly occupied if not built by Colonel Joseph Varnum, grandfather of Generals Joseph Bradley and James Mitchell Varnum.

Examination, it may be added, of the topographical layout of the Pawtucketville "garrison house" should, seemingly, convince anyone of the likelihood that General Reade is right in his attribution of priority to this place of residence. Old Ferry road, which evidently was the first trail from the river northward, crosses the intervale land for a few rods and then turns toward a knoll on the further side of Flag Meadow brook. On this slight elevation, the first that is sure to be above the spring freshets, the house in question was built. Totman street, though it is now a road of little consequence, was, prior to the laying out of the Mammoth road, the main highway from Chelmsford into Southern New Hampshire. At its northern end, where it debouches into Mammoth road, one still encounters the fine colonial farm house that was occupied by Captain Peter Coburn, of Bunker Hill fame.

King Philip's War—During several years of generally pleasant relationship between the settlers of Chelmsford and their Indian neighbors the only danger from hostile tribes that was scented came from the distant Mohawks, who were hereditary enemies of the Pennacooks. It was for the purpose of repelling a threatened invasion of those foes that Wannalancet, who had been living further up river, came down stream about 1669 and constructed fortifications on a slightly hill just east of the Concord river.

The defences thus established gave its name to Fort Hill, now an attractive part of the Lowell Park system. Some antiquarians have thought they found relics of the original fortifications on the sides of the hill, and sharp stones unearthed there have from time to time been asserted to be arrow heads.

The chieftain, meantime, occupied, as during much of the rest of his life, the island of Wickassee, now Tyng's Island, and the home of the Lowell Country Club, some four miles above Pawtucket Falls. This place, still notable for its magnificent white pines, was a valuable cornfield and an hereditary possession of the family of Passaconaway. Wannalancet and his friends had been permitted to occupy and cultivate Wickassee for some years past, perhaps cherishing it the more since in the last year of Passaconaway's sachemship the ownership had temporarily been wrested from them. It then happened that one of the sons of the family went surety for another Indian and, in default of means of making good, was apprehended and lodged in jail in Boston. Wannalancet undertook to release his brother and petitioned for

permission to sell the island. His request was granted on November 8, 1659, and Wickassee was sold to Ensign John Evered, or Webb, as elsewhere related. In 1665 an effort was made to recover the property, three Indians, Unanunquosett, Wannalancet and Nonatomenut, addressing to Governor Richard Bellingham and the General Court the following petition:

To the most worshipful Richard Bellingham, Esq., Govr and to the rest of the Honrd Genrl Court.

The petition of us poore neibor Indians whose names are hereunto subscribed, humbly sheweth that wheras Indians severall years we yr petits out of pity and compassion to our pore brother and countryman to redeem him out of prison and bondage and whose name is Nanamocomuck, the eldest son of Passaconaway, who was Cast into prison for a debt of another Indian unto John Tinker for which he gave his word thr redemption of whome did cost us our desirable posetions where we and ours had and did hope to enjoy our Livelihood for ourselves and our posterity: namely an Island on Merrimack River called by the name of wicosurke which was purchased by Mr. John Web: who hath Curtiously Given Us leave to plant upon ever since he hath possessed the same, we doe not know whither to Goe nor where to place ourselves for our Lively hood in procuring us bread; having beine very Solicitous wh Mr. Web to lett us enjoy our said posetions againe he did condescend to our notion provided we would repay him his charges, but we are pore and Canot so doe—or request is mr. Web may have a grant of about 500 acres of land in two places adjoying his owne Lands in the wilderness, which is our own proper Lands as the aforesaid Island ever was.

10:8:65

NOBHOW in behalf of my wife and children

UHANUNQUOSETT

WANALANCETT

NONATOMENUT

If the Court please to grant this petition then yr petitioner Wanalancet is willing to surrender up ye hundred acres of land yt was granted him by the Court.

This petition, whose wording it may not be unfair to suspect Webb of having supervised, was favorably received by the General Court whose answer was as follows:

In Ans to this petition the Court grant Mr. John Evered (Webb) five hundred acres of land adjoyning to his lands vpon condition hee release his rights in an Island in the Merrimacke river called Wicosauke which was purchased by him of the Indian petitioners—also upon condition wonalancet do release a former grant to him of an hvndred acres and the court do grant said Island to petitioners—John Parker and Jonathan Danforth are appointed to lay out the grant of five hundred acres to John Evered.

EDWD RAWSON, Secy.

Consented to by the Deputies

15 Oct. 1665.

The incident certainly showed no governmental intention of being unfair or ungenerous to the natives; it may be cited as proving the favorable relationships between the races which were in process of establishment when the menace of a widespread conspiracy brought to naught the life work of John Eliot and other devoted friends of the natives.



CHAPTER III.

Onset of King Philip's War.

All New England was affected by the effort which, upon his father's death, Philip, son of the ever-friendly Massasoit, made to align the various Indian tribes against the encroaching whites. The life of the communities about the mouth of the Concord was profoundly influenced by the happenings of King Philip's War, even though little of actual warfare was seen in the district.

Chelmsford suffered hardly at all, thanks perhaps to previous preparation against contingencies of the kind. That the settlers were apprehensive during the years in which the colonial relations with King Philip were approaching a crisis is proved by an order of the selectmen, signed by Samuel Adams, clerk:

25 the 5 month 1671. It is ordered by the Selectmen For Severall Considerations espetially for the preservation of peace That with in one moneth After the Date hear of every maile person with in our towne above the Age of fiveten years Shall provid a good Clube of fouer or five foott in lngth with a Knobe in the end, and to bring the same to the metting house, ther to leave the Same vntill ocation fore use of it be (found, &c.).

Other measures were afterwards taken for defence in case of attack. On the summit of Robbins Hill, the most conspicuous eminence in the town, a house of refuge was ordered built in 1673. The colonial action of three years later in erecting and garrisoning a house on the north side of the river has already been referred to. Whether or not this was identical with the old garrison house near the navy yard which is remembered by people still in middle age, it is probable that the fortification was placed so as to overawe the Wamesits in case of their becoming restless. In the records of the treasurer of the colony is preserved a list of sixty-nine Chelmsford men who did duty at the local garrison houses between November 20, 1675, and September 23, 1676, together with the credits allowed them.

The Christianized Indians of the neighborhood gave, in reality, but little cause for worry during the troublous years of the war. Wannalancet, following his father's pacifist precepts, remained a faithful friend of the whites. Knowing, doubtless, that his people were under suspicion, he withdrew most of them to the Pennacook neighborhood and later to the headwaters of the Connecticut.

In a period of hysteria, however, it was difficult to convince many of the settlers that all red men were not conspiring to murder them in their beds. Certain local happenings helped to explain, while they

certainly did not excuse, the treatment that was meted out to the few remaining Wamesits and Pawtuckets.

General Daniel Gookin, ever a true friend of the "praying Indians," was anxious that Fort Hill be manned by the red men living at its base, these to be directed by eight English soldiers. Valuable protection would thus be assured from marauders. Popular suspicion, however, had been roused to such a pitch that every Indian was regarded as a foe.

Peril to the white inhabitants north of the Merrimack was probably more imminent then than it was to most of the people of Chelmsford. The lands occupied by the Coburns and Varnums were close to the river and almost directly opposite the reservation which the General Court had provided for the Indians. So long, however, as there was no restlessness among these "praying Indians," the farmers' only danger was from wandering skulkers. It was probably some such band of vagrants which, on April 15, 1675, fired on and killed two of Samuel Varnum's sons, young fellows, who were crossing the river in a boat. Only a few weeks previous Joseph Parker, of Chelmsford, had been waylaid and shot to death in the forest. These mishaps tended to increase apprehension. Then a still more alarming situation developed. "Mar. 18 1676," according to Drake's "Indian Wars," "at Chelmsford the said Wamesit Indians fell upon some houses on the north side of the river, burnt down three or four that belonged to the family of Edward Colburn: the said Colburn with Samuel Varnum his Neighbor being pursued as they passed over the River to look after their Cattell on that Side of the River." The attribution of this outrage to the "praying Indians" was quite probably mistaken, but it indicates the temper of the time.

Symptomatic of the general state of fright is a Billerica letter, now preserved in the Massachusetts Archives, which under date of December 25, 1675, reports that scouts have found three houses burnt "near where Joseph Parker was formerly shot." It is stated that Indians have been seen from Billerica, lurking on the west side of the Concord, and that the smoke of various fires in the distance is believed to be theirs. Help is requested "to secure the bridge between them & us," and information is conveyed that "some of the town's men are out, on Major Willard's order, on the north side of the Merrimack to secure the corn of Edward Coburn and others residing there."

Measures for the protection of the Chelmsford-Billerica district were reported to the General Court on January 28, 1676, by Jonathan Danforth, representing a committee whose other members were Hugh Mason and Richard Lowdon, their commission being "to consult the several towns of the County of Middlesex with reference to the best means of the preservation of our out-towns, remote houses and farms,

for their security from the common enemy." Their specific recommendation for the two communities enveloping the Indians at the falls was as follows:

2. That for the security of Billerica there be a garrison of a number competent at Weymessit, who may raise a thousand bushels of corn upon the lands of the Indians in that place; may be improved daily in scouting and ranging the woods between Weymessit and Andover and on the west of Concord River, on the east and north of Chelmsford, which will discover the enemy before he comes to the towns and prevent lurking Indians about our towns. Also they shall be in a readiness to succor any of these towns at any time when in distress; also, shall be ready to join others to follow the enemy upon a sudden, after their appearing.

An attempt was made, too, to bring Wannalancet back to his old home where his conciliatory influence would be valuable. Mr. Henshaw, one of the military leaders of Chelmsford, was ordered:

To take a troop of horsemen and forthwith to march to Chelmsford, and you are to endeavor, either one or both of you (if it may bee) to gaine the Sachem called Wannalancet to com in againe and liue at wamesit quietly pecably: you may promise him in the counccills name that if hee will retorne & his people and liue quietly at Wamesit hee shall susteyne no priudise by the English; only you are to ppose to him that he deliuer for a hostage to the english his sonne who shal be wel vsed by us, & in case hee come in and can bee gained then you are to impour him to informe the Pennakooke and Natacook indians and all other indians on the east side of Merrimack Riuer, that they may liue quietly and peacable in their places and shall not bee disturbed any more by the english provided they do not assist or joyne with any of or enimi y nor do any damage or preiudice to the english.

Anarchy, nevertheless, instead of law and order soon prevailed in the terror-stricken district, with an evident disposition on the part of the lawless element of the population to enjoy the sport of baiting the unoffending redskins.

Although Wannalancet had gone to Pennacook with most of his people, some of the Pawtuckets and Wamesits, as we have seen, remained. These were placed in charge of Lieutenant James Richardson. It presently happened that a barn or haystack owned by him was burned and that thereafter two or three houses were fired. The Wamesits were charged with the incendiarism, and fourteen men of Chelmsford, such is the relation in Felt's Annals, pretending to be in search of hostile Indians from elsewhere, called their unsuspecting neighbors from their wigwams and fired on them, killing one boy and wounding five women and children. The members of this band of citizens were tried for murder, but the jury refused to convict them.

Many of the Wamesits, thereafter, fled to the woods in terror and refused to return. The scandal of the situation was such that the

Governor's Council sent John Eliot and Majors Gookin and Willard to pacify the Indians and to persuade the Chelmsford people to be more moderate in their treatment of their neighbors. The townsmen appear to have resented this effort, for they promptly accused the Wamesits of various crimes and secured the arrest of several of these on charges of setting fires; even though they probably were quite guiltless. Gookin, in recording the circumstances, wrote: "Moreover Lieut. Richardson, whose hay was burned, was a person well beloved of those Indians at Wamesit, and their great friend; who did not apprehend (as he told me) that any of the Wamesits had burned his hay."

Such representations, nevertheless, had been made to the General Court that the Indians were ordered to be brought to Boston, as the story has been succinctly narrated by Edwin M. Currier, in some notes on the Richardson genealogy. On October 20 the court was informed of their near approach: "In number about one hundred and forty-five men, women and children; several of them decrepit with age, sundry infants, and all wanted supplies of food." The court gave orders to send back the old men, women and children and to retain some thirty-three able-bodied men. These latter were imprisoned at Charlestown for several days and finally brought before the court. They denied the charge of burning the hay. No evidence was found against them and they were remanded to prison. The events that followed are best narrated in Gookin's own words:

A vote passed in the house of deputies, as I heard, finding all the Wamesit Indians guilty of burning the hay; but it was not consented unto by the magistrates; and so, after the adjournment of the court, the council ordered the taking out of some of the most suspicious Indians from the Wamesits, who did not properly belong to them, but were come to them since the war. These being garbled out and secured in prison, the rest of the Wamesit Indians, being about 20, were sent back to their wives and children at Wamesit. But as they passed home, being under the guard of Lieut. James Richardson and a file of soldiers, they were to march through a village called Woburn; at which time the trained band of that place was exercising. Lieut. Richardson and his Indians before they drew near the English soldiers, made halt, and he held out his handkerchief as a flag of truce; whereupon the captain and officers of the band sent to Richardson who showed them his commission from the council to conduct those Indians safely to their homes; whereupon the captain and officers gave very strict charge to all the soldiers not to shoot a gun until all the Indians were past and clear; nor yet to give any opprobrious words. But notwithstanding this strict prohibition, when the Indians were passing by, a young fellow, a soldier named Knight, discharged his musket and killed one of the Indians stone dead; being very near him. The murderer was presently apprehended and committed to prison; and not long after tried for his life, but was acquitted by the jury, much contrary to the mind of the bench. The jury alleged they

wanted evidence, and the prisoner plead that his gun went off by accident; indeed, witnesses were mealy-mouthed in giving evidence. The jury was sent out again and again by the judges who were much unsatisfied with the jury's proceedings; but yet the jury did not see cause to alter their mind, and so the fellow was cleared.

When this incident was reported at Wamesit the natives, thinking that their destruction might come at any moment, fled for a second time, leaving six or seven old folk and invalids. As a crowning infamy white men of the neighborhood set fire to the wigwams in which these helpless people had been left, and the invalids were burned to death.

Lieutenant Richardson, who had appeared as the friend of the Indians in these pathetic events, retired, perhaps in disgust, from the region of Wamesit Neck in the following spring and became a resident of Charlestown. His knowledge of Indian affairs was destined to bring him to his untimely death. In the spring of 1677, when the settlers of the Province of Maine were alarmed by Indian raids, the lieutenant and Captain Benjamin Swett were sent by the Massachusetts Governor in command of a body of forty white soldiers and two hundred friendly Indians to the Kennebec river. Landing at Black Point, in Scarborough they were ambushed and both captain and lieutenant slain. From the eight children of this member of the Richardson family, all born at Chelmsford, have come many descendants. The oldest son, Thomas, married Hannah Colburn, daughter of Edward Colburn, and settled near his father-in-law, having purchased an eighth part of the "farme of Capt. Webb," lying along the river where the present Pawtucket boulevard is.

The Wamesits did not return to their settlement until after the war. How cruelly they suffered under the suspicion and brutal treatment which took the place of ordinary humanity in the white man's conduct is proved by a quite pathetic letter written by Simon Betokom, one of John Eliot's pupils. It is signed with the marks of Numphow, their magistrate, and John a Line, who wrote:

To Mr. Thomas Henchman, of Chelmsford. I, Nunphow, and John a Line, we send a messenger to you again (Wecoposit) with this answer, we cannot come home again, we go towards the French, we go where Wannalancet is: the reason is we went away from our home, we had help from the Council, but that did not do us good, but we had wrong by the English. 2dly. The reason we went away from the English, for when there was any harm done in Chelmsford, they laid it to us, and said we did it, but we know ourselves we never did harm to the English but we go away peaceably and quietly. 3dly. As for the Island, we say there is no safety for us, because many English be not good, and may be they come to us and kill us as in other case. We are not sorry for what we leave behind, but we are sorry the English have driven us from our praying to God and our teacher. We did

begin to understand a little of praying to God. We thank humbly the Council. We remember our love to Mr. Henchman and James Richardson.

Ill-prepared for a sojourn in the wilderness, these faithful friends of the colonists are believed to have undergone great hardships in their wanderings toward the headwaters of the Connecticut.

The town of Chelmsford underwent some pecuniary loss on account of the war. Upon petition to the General Court for relief the following order was granted: "In answer to the petition of the selectmen of Chelmsford, &c., it is ordered that Chelmsford be allowed and aloted the sum of fivety three pounds, seven shillings and one penny out of their last term county rates towards their losses." One man, at least, from the farms that occupied parts of the city of Lowell lost his life in service against the hostile Indians to the southward. Edward Coburn, Jr., who had come with his father from Ipswich to a share in the Webb property in Pawtucketville was of a militia company that went into the action at Squakheage, now Brookfield. The circumstance leading up to this affray was that in July, 1675, a band of Nipnucs from King Philip's district fell upon the village of Mendon and murdered four or five people. A punitive expedition was sent after them consisting of some twenty men in charge of Captains Wheeler and Hutchinson. These were ambushed near the present Brookfield by a band of upwards of 200 Indians and several of the white men were slain.

Last Years of the Indian Community—The death of King Philip, on August 12, 1676, brought to an end a period in which fifty-three towns of the English were wholly or partly destroyed, upwards of 600 lives of white people lost and an indebtedness of more than half a million dollars incurred by the colonists. To the Indians, whether hostile or friendly, the losses due to the war were irreparable. The life work of John Eliot and Daniel Gookin was undone not only at Wamesit, but in the entire Commonwealth. At the outbreak of the trouble it was estimated that there were about 10,000 praying Indians in New England. Thereafter this element of the population rapidly faded away. Most of the separate communities were broken up, though many individuals, of course, became members of the white townships. It is perhaps true that there is to-day more Indian blood among old New England families than has sometimes been conceded. Otherwise nothing but a memory remains of one of the most creditable undertakings of the Puritan governing class.

Wamesit, as an Indian town, did not, nevertheless, immediately disappear from the map. Wannalancet presently returned to his former haunts and sought out the Chelmsford minister to compare experiences. A familiar anecdote, which may have as much historical

foundation as the majority of such sayings, represents him as asking Mr. Fiske whether the town had suffered much during the war. When the clergyman replied, "Thank God, no," "Me next," asserted Wannalancet. Taking advantage of the grant that had been made him in 1665, the chieftain with a number of his Pawtuckets returned to the island and came under the personal protection of Colonel Jonathan Tyng, of Dunstable, their nearest neighbor. There is an indication of this good man's watchfulness for their interests in a communication received by the colony's Governor and Council on March 24, 1677, signed by James Parker, who wrote "from Mr. Henchman's farme ner Meremack, hast post hast." Describing a warning against prowling Mohawks, Parker wrote:

To the Honored Govner and Counsell. This may informe youer honores that Sagamore Evanalanset came this morning to informe me, and then went to Mr. Tyng's to informe him, that his son being on ye outhur sid of Meremack River a hunting, and his dauter with him. up the river, over against Souhegan, upon the 22nd day of this instant, about ten of the clock in the morning, he discovered 15 Indens on this sid of the river which he sposed to be Mohokes by their speech, and he having a canow ther in the river, he went to breck his canow that they might not have ani ues of it, in the menetime thay shot about thirty guns at him, and he being much frighted, fled and came home forthwith to Nahamcok, wher ther wigowemes now stand.

After some years of quiet residence on the island, Wannalancet and his surviving Pawtuckets gave up the lands they had been permitted to occupy and wandered to Canada, where for six years they lived among the St. Francis Indians. Here the sachem, now aging fast, might have breathed his last, but that in 1692, in a time of peril due to King William's War, white people living in and about Chelmsford suddenly remembered what a friend and protector he had been during the previous era of hostilities. It seemed to them that again he might be able to stand between the settlers and the hostile red men. A special envoy was sent to urge the Pawtuckets to return to Massachusetts. With this wish Wannalancet complied and during the war was once more helpful and considerate.

The last years of the old chieftain were spent in what is now Tyngsboro on the Merrimack. Colonel Tyng gave him shelter in the mansion, still standing, near a fine bend in the river, and here for four years Wannalancet wandered about the grounds and exchanged reminiscences with his white friend. When he died he was buried in the Tyng cemetery. Over a boulder in this burying ground, in whose shadow, according to tradition, he often used to sit in warm weather, the Society of Colonial Dames of Massachusetts has placed a tablet bearing this inscription: "In this place lived during his last years,

and died in 1696, Wannalancet, last sachem of the Merrimack River Indians; Son of Passaconaway. Like his father, a faithful friend of the early New England Colonists."

Wannalancet outlived by some years the two great white men who had rejoiced in his conversion and friendliness. John Eliot died in 1690. "He had the mortification," Cowley writes, "to see the labors of more than 40 years terminate in failure. He lived to witness the fourteen Christian towns which he had organized reduced first to seven, and afterwards to five; and even these were not long to survive. Much of his time, toward the close of his life, was spent in promoting education among the negroes, many of whom were now living in the colony as slaves." Daniel Gookin, who had been made major-general in 1681, died in poverty in 1687, a year after he had been deposed from his office through the dissolution of the charter. Cowley pays this tribute to his memory: "Though a man of some bigotry and many prejudices, his understanding was excellent, his integrity inflexible, his patriotism disinterested, his piety exemplary, his religious and political principles firm and unchangeable; he was zealous, active and benevolent, and a true friend to the Indians who mourned his death with unfeigned sorrow."





LOOKING UP THE MERRIMACK RIVER TO LOWELL.

CHAPTER IV.

The Wamesit Neck Proprietorship.

Indian occupancy of lands situated close to one of the most valuable fishing privileges in New England could hardly have continued into the eighteenth century. It was the way of the white man, in normal times, to buy for a pittance what, in case of refusal, he would have taken by the sword.

By 1685 residents of Chelmsford were already taking steps to purchase the title of the Wamesits and Pawtuckets to the reserved triangle between the two rivers. The deal, which was doubtless fair enough of its kind, was consummated by Jonathan Tyng, of Dunstable, and Major Hinchman, of Chelmsford. It was followed by the allotment of the property, covering practically all the older part of the city of Lowell to fifty proprietors. This proprietorship continued for nearly a century, and the record book of its transactions, preserved by descendants of Benjamin Parker, the last survivor of the original proprietors, gives more information than, perhaps, any other single document regarding the settlement of the district whose apexes were Middlesex Village, North Billerica and the point of confluence of the rivers.

The "fifty associates," as they might be called in modern legal parlance, who acquired the Neck, and who with the original settlers in Billerica east of the Concord, and in the Centralville and Pawtucketville districts of the old town of Dracut, may be termed the fathers of the city-to-be, were as follows:

Worshipful Jonathan Tyng Esq. (of Dunstable), Major Thomas Hinchman Ensign John Fisk Sergt. Josiah Richardson (of Chelmsford) Mr. Moses Fisk, Mr. Thomas Clark, Josiah Richardson Junr. Jerameel Bowers, James Richardson, Thomas Parker Solomon Keyes Joseph Parker Sen. Joseph Hide Edward Spaldin Senr. Stephen Peirse Benj. Parker Moses Parker Andrew Spalden Eliezer Browne William Underwood Nathaniel Howard Junr Jno. Wright Junr. Jno. Porrum Jno. Spaldin Junr. Joshua Fletcher Benj. Spaldin Joseph Spaldin Joseph Farwell Solomon Keyes Senr. Peter Talbot Jno. Kidder Wm. Fletcher Samuel Foster Junr. Edward Foster Samll Foster Senr. Jno. Steevens Nathaniel Butterfield Samuel Butterfield, Joseph Butterfield Jno. Spalden Sen. Jno. Shipley Mr. Cornelius Waldo Senr. Geo. Robbins Jno. Parker Jno. Balde Gorsham Proctor Peter Proctor Isaac Parker Abraham Parker.

Two separate purchases of special interest should be noted.

Wannalancet's old planting field at Middlesex Village, whence he used to go two miles to hear John Eliot preach in the log chapel on

Meeting House hill, was bought by Major Henchman on November 18, 1685. This was a tract of about thirty acres which is described as being "south of Merimack river at a place called Neahambeak near Wamesit upon Black brook—bounded by Merimack river on the North Hinchman land on ye west it contains that whole corn field fenced in with ditch & otherwise that was broken & improve for some years by said Sachem Wanalansit & by his sonnes & by his men it lying near to the old Indian fort in that place." At the east end of the Wamesit purchase was another Indian field which was bought by Jerathmeel Bowers "for 3 pounds & also much former kindness" on June 9, 1686.

Even after those sales of the acres from which their ancestors had dominated Central New England, a few of the Wamesits and Pawtuckets lingered in the neighborhood. The last vestige of their ownership of land on which Lowell is now built was removed by a deed of 1714 conveying to John Borland, a farmer in the district now called Belvidere and then a part of Billerica, about 250 acres to which heretofore the Wamesits had had a claim. This conveyance grew out of an earlier one, of May 11, 1701, by which James Meinzie, of Boston, had sold to Borland some 930 acres of the grant originally made to Margaret Winthrop. As some of this land was held by Indians Borland's title was defective, and under the law he could acquire this part of the property only by special permission of the General Court. To perfect the Borland title it accordingly was decreed that Colonel Tyng might represent the colony in purchasing these acres from the Indians and thus perfecting John Borland's title. In 1714 Tyng completed the transactions. The final deed, though long, is so replete with local interest, that it may well be set forth in entirety:

To all People to whom these prsnts shall Come Greeting, Know ye, that Wanalansit Sachem, John Numphow, Sam Numphow, John Aline, Simon Bitticum and John Conaway Indians, formerly both they and their predecessors, the Ancient Inhabitants of Weymosit wch lyeth at the mouth of Concord River in the County of Middx. in the Massachusetts Bay which is in his Majesties Territory and Dominion of New England For and in Consideration of Several Sums of money & goods To the value of Twenty Three pounds To them and to Each of them (being Severally Divided) well and truly paid by Jonathan Tyng of Dunstable, Esqr. the receipt whereof the sd. Indians Severally Each prson for him Selfe Do by these prsnts acknowledge and therewith to be fully satisfied Contented and paid and thereof and of Every part & parcel thereof Do fully freely Clearly and absolutely acquit Release and Discharge the said Jonathan Tyng his heirs and assignes for Ever by the presents grant bargain & sell, have granted, bargained & sold and by these presents do fully freely clearly & absolutely alien, Enfeoffe and Confirme To ye sd Jonathan Tyng, and to his heaires and assignes for ever Two several parcels of Land lying at Weymesit by the mouth of Concord River, and it lyeth on both Sides of Said River, one parcel of it lyeth on ye East Side of Concord River, and Contain-

ing the old Planting ground that said Indians them Selves and their predecessors wth their Associats, have for very many years Improved by planting and Fishing, and Dwelling thereupon, which parcell of land Contains about Two hundred and Twelve acres, be ye same more or less and is bounded by Merimack River four Score poles and So runs in a straight Line neerest ye South to take in the Greatest part of the old Fort Hill and bounded Southward by the fence of ye old Indian Field and Westward by Concord River. The other parcel contains by Estimation Three Score & Ten acres be the Same more or less, and lyeth on the west Side of said River and bounded by it Eastward, and Contains only that Land which now is and for many years hath been within the Indian Ditch where ye last Fort Did stand. To Have and to Hold the above granted and bargained wth all ye privileges and appurtenances to the Same appertaining, or in any wise belong To him the said Jonathan Tyng and to his heires and Assignes for Ever. To his and theire only proper use and behoofe, And they the sd. Wanalansit Sachem John & Sam Numphow John Aline, Simon Betticum and the rest of sd. Indians for them Selves their heires and Administrators, Do Covenant promise and Grant To and wth ye sd. Jonathan Tyng Esq. & wth his heires & Assignes by these prsents. That they and Each of them (according to ye Ancient Laws and Customs of their predecessors and forefathers, and according to former Laws Established by ye Englishmen in this Massachusetts Bay, Have good right full power and Lawfull authority the premises to grant bargain and Confirme To him the said Jonathan Tyng and To his heires and assignes for Ever And that he ye said Jonathan Tyng his heires and Assignes for Ever, Shall and may at all times and from time to time for Ever hereafter quietly and peaceably Have, Hold occupy possess and enjoy all and Every part of the above granted premises lying on both Sides of Concord River as aforesd. both upland and Meadow Land wth the woods and Timber, Springs, Water Courses, and fishing places, wth all other privileges to ye Same appertaining as aforesaid, without the Lawfull Lett hindrance Contradiction or Denyall of them ye above named Indians, or of either of them, or of any other prson or prsons whatsoever (whether Indians or English) Lawfully Claiming or haveing, any right, Title or Interest therein, or theire unto, by from or under them or Either of them, or by theire meanes & procurements, or by vertur of any Indian right or Title there unto, or to any part thereof by any Lawfull wayes and means whatsoever. In Witness whereof the above named Indians have affixed their hands and seales hereunto December ye Second in ye year of our Lord God Sixteen hundred eighty and Seven and in the Third year of ye Reign of our Sovereign Lord James the Second—Wanalansit his mark and seal. Sam Numphow his mark & a seal. John Conoway his mark and a seal. John Numphow his mark & a seal. Joseph Aline his mark and a Seal. Signed Sealed and Delivered in the present of Jerahmere Bowers, Elizabeth Bowers her mark, Hannah Bowers her mark Middx. Concord Augt. 31st 1714 Before ye Court of Genll Sessions of ye Peace then & there held within & for ye County of Middx prsonally appeared Capt. Jerahmire Bowers one of the witnesses Subscribed to ye within written instrument & made oath that he was prsonally prsent and Saw the respective Subscribers vgt. Wanalansit, Sam Numphow, John Conaway and Joseph Aline Sign, Seal and Deliver the within written

instrument as their Act and Deed and that he then with Elizabeth Bowers and Hannah Bowers did set their hands thereunto as witnesses.

Att. Saml. Phipps Cler pacs. Charlestowne Augt.
31 1714 Recd. and accordingly Entrd. by
Saml. Phipps Regs.

With the execution of the foregoing deed the Indian ceased to be a factor in the life of Wamesit Neck, as the neighborhood was now called. The remaining aborigines doubtless were absorbed in general population. It is related that one Indian family was resident in the northern part of Dracut toward the end of the eighteenth century and that two or three men of the race were regularly employed to guide rafts of logs over Pawtucket Falls. How long a few Indians continued to come periodically to Pawtucket Falls would be hard to say. The wandering red men who were noted in the vicinity from time to time even after the founding of the village of Lowell may or may not have had any racial connection with the Wamesits and Pawtuckets. The Indians, certainly, had not entirely disappeared even toward the middle of the nineteenth century, if we may credit a writer in the *Operatives' Magazine* for February, 1842, who says: "The Pawtucket Falls and their immediate vicinity were formerly the favorite resort of the Indian tribes of the surrounding country, and annually a small and degraded band of their posterity still visit the place, pitching their tents a few rods below the falls, where they remain till the autumnal winds remind them that cold winter is near, and they must away."

Wamesit Neck in Colonial Times—A century intervened between King Philip's war, which ended the possibility of continued existence of an Indian community at Wamesit, and the Revolution which marked the beginning of American economic as well as political independence, and which ushered in the era of exploitation of New England water powers.

During the major part of the eighteenth century Wamesit Neck was a less important place under the cultivation of white farmers than it had been in earlier days when it was a town of the praying Indians. For a long time, indeed, the political status of the land on which downtown Lowell is built was undetermined. The few dwellers on the grants did not even know to what town they legally belonged, though they attended church at Chelmsford Centre. Only over the river in the present Pawtucketville was there a characteristic civic centre of the type established in colonial New England.

To write a longer history of Wamesit Neck or East Chelmsford, as it eventually was called, through the late seventeenth and the eighteenth centuries would be a most intricate task, and profitable only in a technical sense. Rights were sold and resold. Some of the

proprietors came and built on their holdings; others simply used the common field for pasturage and continued to live elsewhere.

The beginnings of the ownership, fortunately, are well explained in the minutes of the proprietors, to which reference has already here been made. The title page of this record book of the earliest Lowell real estate syndicate reads: "This book belongeth to the purchasers & proprietors of the Wameset neck and was bought by their order and for their use may: 26:1687; prise 4 s." It shows that the individual lots extended from a great fence on the southerly side of the property to the river on the north and east, running into what was known as the Pawtucket meadow, extending from the foot of the falls to the mouth of the Concord along the line of the present manufacturing corporations. A general field, or "Wamesit Field," of evidently about 900 acres, was used in common for some years for pasturing stock. Regulation of this usage was obviously necessary. On March 7, 1712, it was voted "that every man that hath Right or Rights in sd neck: may turn in six creatures to a Right & no more." The bounds of this common field are thus described by the premier historian of Chelmsford, the Rev. Wilkes Allen, who wrote in 1820: "The north west boundary of said 'purchase' began near the head of Middlesex Canal and so on to the glass manufactory and thence running near the houses of the late Mr. Philip Parker, Mr. Micah Spalding: and Capt. Benj. Butterfield, terminated at Wamesit Falls in Concord or at the mouth of River Meadow Brook." For further identification, Henry S. Perham, in a paper before the Old Residents' Historical Association, stated that the above-mentioned Mr. Parker lived on the present Pine street; Mr. Spalding at School and Liberty streets, and Captain Butterfield on Hale street, near Lincoln square. A tract that is still easily recognizable from its geological and dendrological character is called in the records the "great pine plain." It obviously covered land where the Edson and Catholic cemeteries now are.

The ownership of the triangle thus bounded by the two rivers from the upper falls on each and the line of the present Middlesex Canal became so complex that the ramifications can hardly be set forth in detail. As mentioned, Hamblet stated some twenty years ago:

To follow these titles separately would require an examination of nearly all the land titles within that territory, involving an immense amount of labor, and which historically would be of little or no special interest. Nearly the entire tract of land was, for nearly one hundred years, used for farming purposes and, except in few instances, nothing of special interest was attached to it in that time. In 1726 all the territory south of Merrimack River, lying between Concord River and the Town of Chelmsford, was annexed to, and became a part of, the Town of Chelmsford. The Indian Town, as a distinct territorial district, became extinct. One of the most prominent of the settlers on the

boundary of the old Indian reservation was Jerahmere Bowers to whom in 1686 Wannalancet conveyed a considerable tract of land near Pawtucket Falls. Bowers' descendants continued ownership of portions of this district down to recent times.

The number of proprietors at Wamesit Neck was by 1750 reduced to the following list: Thomas Fletcher, Andrew Fletcher, Henry Fletcher, Benjamin Parker, Joseph Moors, Stephen Fletcher, Jerathmel Bowers, Benjamin Parker, Eleazer Frost, Robert Peirce, Josiah Fletcher, Henry Stevens, Robert Fletcher, John Burg, David Butterfield, Ebenezer Parker, James Perkust (Parkhurst), John Butterfield, Stephen Peirce. Among these names are recognized of course, progenitors of leading families of the city of Lowell.

A somewhat similar statement of intricacies might be made concerning the farm properties on the Billerica side of the Concord. The tracing of old boundaries is still full of knots for antiquarians.

Settlement of the lands lying just east of the Concord river was about simultaneous with the occupation of Wamesit Neck. The familiar name of "Hunt's Falls" in the Merrimack, just below the ingress of the Concord, recalls the settlement of northwestern Tewksbury by Samuel, son of Samuel Hunt, born in England in 1605, and one of the first inhabitants of the town of Concord. The son Samuel bought 3,000 acres of land at the lower end of the Concord river and along the easterly shore of the Merrimack as far as the Andover line from the Winthrop estate in 1691. It was he probably who sold to Jona. Bowers eight acres of the Wamesit purchase, March 14, 1705. Descendants of Samuel Hunt in and about Lowell have come down through his son Peter, who was born in 1692, who in 1715 married Mary Sheldon.

John Borland, already mentioned as a pioneer farmer in the Belvidere district, is known to have sold a portion of his large holding to others. The name of Sprague, often spelled Sprake, comes into the record in 1737, when Joseph Hunt, who had purchased from one of the heirs of Margaret Winthrop, conveyed to Nicholas Sprake, of Billerica, a small tract of about forty acres at the falls on the Concord river. Something is said about a dwelling house and barn on the property. These farm buildings must have been somewhere near the east end of Church street bridge. One of the first settlers on the Borland land was Thomas Farmer, the deed of whose ownership has not been found, but who in 1735 conveyed to his son Thomas, in consideration of £150 about forty acres on the Concord, a tract bounded easterly "to a walnut tree which is a corner bound from thence running southwesterly by a long fence to aforementioned Concord River." This purchase, according to Hamblet, ran along the Belvidere shore of the Concord, but did not quite reach the Merrimack. In 1738 it was

conveyed by the younger Farmer to Nicholas Sprague, Jr. Leases of Borland land are recorded as taken out by Thomas Taylor, Jacob Saunders and Edward Boatman, the last of these expiring in 1785. After Borland's death his sons, Thomas and Samuel, occupied parts of the farm. The interest of all the other Borland heirs was bought out in 1785 by Leonard Vassall Borland, who conveyed the whole property on January 23, 1785, to Jonathan Simpson, Jr.

Old Days in West Dracut—Over the river, where there was no problem of a "real estate trust" such as that of the Wamesit Neck proprietorship, family histories and holdings are as easily followed as perhaps anywhere in Massachusetts.

On the fine level tract that borders Flag Meadow Brook in Pawtucketville, Thomas Varnum, the first of six successive Varnums of that Christian name, laid the foundations of markedly successful agriculture, continued down to the present writing. A boy of fourteen when he saw his two older brothers shot by the Indians, the first Thomas Varnum had married Joanna Jewett, of Ipswich, and settled into a peaceful and useful life that lasted until 1739. Further down river were his brothers, John and Joseph, the former of whom, "in consideration of Six bushells of god Merchantable Indian Corne," had bought of Jonathan Kidder, of Chelmsford, his right, title and interest "in a Tract of Land lying upon ye North Side of Merameck River, at a place Called by ye name of Pawtuccett falls, by estimation Five Hundred acres." These three brothers all lived in the Lowell of to-day, the youngest occupying territory toward the mouth of Beaver Brook, where the Lowell Textile School has become a landmark. The records of their many transferances of property are well established, and details of their manner of living are fairly known, as will presently appear.

Many towns of Massachusetts were originally laid out on too large a scale; Chelmsford and Billerica were not exceptional in this regard. As holdings were taken up in the distant parts of a township, the rigors of a long drive to church and to town meeting were resented by those most affected. Presently a nucleus of families would resolve to have a parish of their own. That meant petitioning the Legislature for separate recognition.

Precisely this integration of new communities took place in the wide areas claimed by the two towns whose original line of separation was the lower Concord.

That the lands lying north of Pawtucket Falls would presently be set off into a separate jurisdiction might have been predicted on the day when Edward Colburn and his sturdy sons began to build their houses on the Chelmsford flats. Their progeny were numerous. Attendance at church by way of a ferry at the site of the present

Middlesex Village and with thence a long drive to Chelmsford Centre was difficult. As farms were taken up northward and eastward from the falls a certain community life began to develop; though it was nearly half a century before the district had a church of its own. Gordon's researches indicate a rough and ready mode of living in those years prior to incorporation, and include the discovery of a murder—the killing of a Richardson in a brawl by one of his Coburn brothers-in-law—"and I find no indictment based on this lamentable scuffle."

In 1701 petitioners to the General Court designated Dracut as "A tract of land beyond Chelmsford, in Massachusetts, which runs seven miles eastward on the North side of Merameck River, from Dunstable line, and then six miles northward from said river." This was not, however, the first petition for corporate recognition. As early as 1693, according to the Court Records, Massachusetts State Archives, vol. 113, p. 19, the following request was presented:

To his Excellency Sir William Phips, Knt. Capt. General and Governor in chief of their Majss Province of the Massachusetts Bay in New England with the Honble Council and representatives of the same now assembled in Gen'l Court held at Boston, November 14, 1693.

The Petition of the Inhabitants of the Lands lying on the north side of Merrimack River in the county of Norfolk [crossed out and Essex inserted] in New England.

Humbly sheweth. That ye petitioners have been at great cost and pain in settling themselves upon these present Improvements each at their own proper charge they purchased without having one foot thereof given them. besides they have greatly suffered in their persons and Estates in the past and this present warr by fires, killing and wounding of sundry of their neighbors and otherwise. whereby they have been greatly Impoverished. And there being a Tract or parcell of barren wast or Woodland unimproved and not as yett Taken up by any, lying betweene the Lands and meadow of ye petitionrs, containing about two hundred acres, extending the whole Length of their Lands, as more particularly appears by the Draught hereto.

And ye Petitionrs having no out lett or Commons to their Lands for fire-wood, or pasturing for their Cattle Find it to be an Incredible Inconvenience to their Improvement.

Your Petitionrs Therefore humblye praye, &c.

SAMUEL VARNUM,	DANIEL ROLFE,
EDWARD COBURNE,	THOMAS RICHARDSON,
JOHN COBURNE, SR.,	THOMAS VARNUM,
THOMAS COBURNE,	JOHN VARNUM,
DANIEL COBURNE,	JOSEPH VARNUM,
EZRA COBURNE,	JOHN COBURNE, JR.,
JOSEPH COBURNE,	THOMAS COBURNE, JR.

This petition was granted November 16, 1693, by the General Court. The Council confirmed it on November 27 following. Nine

years later, when the petition was written which resulted in the laying out of the township of Dracut, the signers were the same, with the exception of Daniel Rolfe, whose interest had been purchased by the sons, Thomas, John and Joseph Varnum. This latter petition carried the names of Samuel Sewall, Benjamin Walker, John Hunt and Jonathan Belcher, who held grants "in ye wilderness north of the Merri-mack," and Samuel Varnum and several others. It asked for "authority to lay out a town." It was acted upon on February 26, 1701-02. In Judge Sewall's personal diary is the entry: "Feby 26 1-1702 Sixteen of the Council sign an order for making Dracut a town." The wording of this resolution follows:

Resolved, That the prayer of said petition be granted, and the tract of land therein described be made a township & be called by the name of Dracut.

Provided, That the bounds specified intrench not upon and former Grant or Grants of townships.

That the Inhabitants of said land assist in ye maintainance of the ministry at the Town of Chelmsford, as at present they do, until they are provided with a minister as ye law Directs.

That a General platt of said land (taken by a Sworn Surveyor) be laid before Court at their Session beginning at May next, and

That if any land shall happen to fall within the bounds above-mentioned that hath not heretofore been granted, it shall be reserved to be disposed of by this Government.

The new township, including, of course, the sections of Lowell now called Pawtucketville, Centralville and the district just beyond the Aiken street bridge, was "laid out and bounded by Jonathan Danforth, Survey'r, May 26, 1702." The original area, which has since been much reduced, was 22,334 acres, extending into what is now Southern New Hampshire.

Such was the only "incorporation" which Dracut had. The Royal Charters of the colonies recognized no right of self-government among the colonists, and the Great and General Court never attempted to grant rights or privileges beyond those conferred by the King and his ministers. "Authority to lay out a town," however, might be granted upon petition, and this was what happened in the case of Dracut. As further evidence of the date of this authorization there is a map, in possession at this writing, of John M. Varnum, of Boston, certified as being "a True Copy exd by Benj. Johnson," with this written statement of title: "Dracut Township Laid out ye 26 3m 1702 by Jonathan Danforth Surveyor." This has been verified as a copy of a map which was made in compliance with the order of the court "that a Generall Plot of said Land be laid before this Court at their session in May next." The next proceeding was the final and authoritative act of "laying out the town," which is thus dated and recorded: "May 26,

1702," being identical with the date given in the map just referred to, under which date the court records state "According to the order of the Honble General Court there is laid out to the Inhabitants and Proprietors of Dracutt a tract of land for a Township."

Besides the section of West Dracut at the head of the falls, two other districts of Lowell, now well populated, had their sparse early settlements in the first decades of the eighteenth century.

The sandy plain extending from the mouth of Beaver Brook fell largely into the hands of descendants of Sergeant Richard Hildreth, of Cambridge and Chelmsford.

The contribution of the Hildreth family toward the development of Lowell has been excellently covered by General Philip Reade. No one, indeed, has more thoroughly examined both the Dracut records and the archives of the Commonwealth than this distinguished investigator upon whose researches every one who writes about the Spindle City's beginnings must depend. In general it may be said that what the progeny of Samuel Varnum were to the Pawtucketville district, the descendants of Sergeant Richard Hildreth have been to the region between the east bank of Beaver brook and the summit of Christian Hill. A stock in which marked aptitude for military and political service has been handed down from generation to generation, the Hildreth strain has considerably dominated the district by force of character ever since June, 1709, when Benjamin Walker, of Boston, and Ephraim Hunt, of Weymouth, conveyed to Ephraim Hildreth, of Chelmsford, for £400 current silver money of New England some 1,300 acres of land "upon Merrimack river upon a ditch which divides it from the land of Jonathan Belcher over to Beaver brook, so across being on the west side of Beaver brook, joining upon the Merrimack river." The children and grandchildren of Ephraim Hildreth were prominent in every situation that arose during the late colonial and revolutionary eras; among the descendants in the generations now living are not a few of the foremost citizens of the community under consideration. The Hildreth mansion, still standing, was one of the solidest pre-Revolutionary structures of the neighborhood. The enclosure in which rest the remains of many Hildreths, Foxes, Joneses and Hoveys is one of the relics of older Lowell to be shown to every visitor who is interested in local history. This burying ground, still owned by the town of Dracut, though situated within the bounds of the city of Lowell, was given to the town by Major Ephraim Hildreth. His own remains were placed there in 1740. Here lie his son Elijah, who died in 1814; his grandson, Lieutenant Israel Hildreth, who died in 1839, and Dr. Israel Hildreth, who was laid to rest in 1859. Of the children in the next generation of Hildreths there rest in the cemetery: Sarah Jones, wife of General Benjamin F. Butler, died in 1876; Fisher

Ames, died 1873; Susan, wife of Hon. William Prentiss Webster, died 1874; Harriet, wife of Franklin Fiske Heard, died 1866; Dolly Maria, wife of Colonel John Milton Grosvenor Parker; Laura Wright, wife of George Howard Pearson, died 1891; Rowena, wife of Henry Reade, died in 1913.

The deed of conveyance of this ancient burying ground was placed on record by Major Hildreth's sons twelve years after his death. It reads as follows:

Dracut, November 17, 1752.

We the subscribers, being willing to confer our Honored father Promise, Verbally made, Relating to the Buring place Now in Use in Dracutt, to which Track of land their hath, as yet, Been no titel, we therefore confer the same by the following Record: Said Track of Land being Bounded as followeth: Bounded Esterly by the Highway leading to Robart Hildreth Ferry, the northwest corner is a stak and stones by said Road; Thens Runing Westerly Eight Rods and a half to a stak and stone; Thens Runing Southerly Nine Rods to a stake and stone by the said Highway: the above mentioned sd. Track of Land Hand is and is to Remain a burying Place for the Town of Dracutt; and in Testimony of the above Record being and Remaining a good and faire Titel to the Town of Dracutt of the above said Track of Land, we have hereunto set our hands the day above mentioned.

EPHRAIM HILDRETH,
WILLIAM HILDRETH,
ELIJAH HILDRETH.

Entred pr Ephraim Hildreth, Town Clerk.

The peculiarity of the present jurisdiction of the Hildreth cemetery, it may be added, brought it into controversy a short time prior to the preparation of this history. A threat on the part of City Treasurer Andrew G. Stiles, in September, 1913, to sell the cemetery, situated within the Lowell limits, but belonging to the town of Dracut, caused no little excitement. The case was one in which the adjoining town had neglected to pay a bill of \$398.13 on account of a sidewalk on Hildreth street. Had the old burying ground been sold at auction as proposed it would have been necessary to remove the remains of General Benjamin F. Butler and his wife, to say nothing of the ashes of many ancestors of the present generation. Upon the publication of an advertisement of the property, including 118,037 square feet of land, in Lowell newspapers, Warren W. Fox, town counsel, promptly petitioned the Suffolk county courts for an injunction to restrain the city of Lowell from selling the cemetery. The essential historic facts on which the Dracut petitioner relied were as follows:

Prior to 1740 the ground was dedicated to the town of Dracut to be used as a cemetery by Major Ephraim Hildreth, one of the earliest settlers. He died about the year 1740 and in 1752 his three sons, William, Ephraim and one other joined in a deed confirming that dedica-

tion. That deed is now in existence, and we have a copy of it. It states, in substance, that the land is to be used for burial purposes forever. And it has been so used up to the present time, and we intend that it shall be. The town has always looked after the cemetery and has paid for its upkeep. When a board of cemetery commissioners was appointed the direct control of the place passed into their hands.

The beginning of a settlement at the base of Christian Hill, that is to say of the present suburb of Centralville, dates from about the middle of the eighteenth century. In 1758 Solomon Abbott, of the fourth generation from George Abbott, of Andover, bought from John White a tract of 110 acres with buildings and fishing rights, a property formerly belonging to Robert Hildreth. This farm extended from the present First street to Tenth street, and from Bridge street to the crest of the hill. Abbott presently sold fifty-seven acres of his holding and the ferry to Amos Bradley of Haverhill, retaining his hillside pastures. One of his sons, David Abbott, owned a farm on the easterly side of the hill including the islands in the river at the foot of Hunt's Falls. These islands were known for a long time as Abbott's Islands. Another son, Daniel Colby Abbott, bought the farm on Hildreth street from John Bowers, which was inherited by his son Daniel.

Old-Time Ferries—Communication between the farms on opposite sides of the Merrimack was by boat for more than a century.

The earlier and more important ferry was that operated from Middlesex village and connecting on the further side with the now grass-grown roadway between the Boulevard and Varnum avenue that is called Old Ferry road. Its continuation, now Totman street, was the main route of travel to the towns of Southern New Hampshire east of the river. A reminder of the nature of the ancient ferry scenes may be seen in the Durkee house in Old Ferry road, said by some authorities to be the oldest dwelling in Lowell north of the river. It is, of course, not actually the oldest if General Philip Reade is correct in his surmise regarding the nearby Coburn house in Varnum, but it at all events dates well back into the first days of the town. The records show that in 1754 this Durkee house was owned by Abraham Coburn, who sold it to Abraham Blood, in whose family it remained for more than a century. In 1856 it passed into the ownership of William H. N. Durkee, whose name it bears. When the ferry was still operated, that is before the building of Pawtucketville bridge, the Blood house was a popular tavern at which teamsters starting northward on the long road to Pelham, Derry and beyond were wont to secure food and drink.

The ferry which preceded Central bridge at a point just above the confluence of the rivers became one of the most famous on the lower Merrimack. Its history has been given by John M. Varnum in an

account which shows that for nearly seventy years the ferry was owned and operated by members of the Bradley family.

Amos Bradley, of Haverhill, on October 1, 1761, purchased the ferry and fifty-seven acres of land for £266 13 6 from Solomon Abbott, of Dracut. It had previously been known as "Abbott's Ferry" and, prior to 1758, as "White's Ferry."

Amos Bradley and his son, Joseph Bradley, owned and conducted this ferry down to the erection of Central bridge. The equity was conveyed by Joseph Bradley, October 26, 1827, to the Central bridge corporation of which he was president. From 1761 to 1827 this crossing was the only one between Pawtucket Falls and Deer Jump Falls in Eastern Dracut. The rates of ferriage in 1810 at Bradley ferry are a matter of court record, for in that year Nehemiah Bradley, brother of Joseph Bradley, was licensed as ferryman by the Court of Common Pleas as Concord, in the following terms:

For each foot passenger, 2 c; for each horse and rider 6 c; for each cart, sled, or other carriage of burden drawn by two and not more than four beasts, 20 cents; for each additional beast, 4 cents; for each riding sleigh drawn by two beasts, 15 c & four cents for each additional beast; for each chaise, chair or sulkey 17 c; for each curricule 20 c; for each coach, chariot, phaeton or other four-wheeled carriage for passengers 32 c; for neat cattle and horses, exclusive of those in carriages, or ridden, 4 c; for each sheep & swine 1 c & 5 mills, and only one person as a driver of each team shall be allowed to pass free of toll.

A small ferry was operated on the Concord river near where the present East Merrimack Black bridge crosses.

An Early Plan for Separate Incorporation—While the farmer folk over the river early acquired a stable town government of their own, the proprietors and others who lived on the former Indian reservation of Wamesit were, apparently, content for forty years not to know to whom they belonged. It was presumably supposed, in a general way, that they were under the jurisdiction of Chelmsford, but when the town sent to the General Court in Boston Deacon Stephen Peirce, of Wamesit, this representative was refused a seat on the ground that he was not a resident of the township he claimed to represent. Angered by this action the people at the Neck refused to pay their taxes and petitioned to be "erected into a separate and distinct town." The proposal was to incorporate the northern part of Billerica, including about 500 acres on the east side of the Concord and about 2,000 acres of the old Wamesit reservation.

This quest for separate incorporation probably did not please other residents of Chelmsford, for the selectmen put in a counter petition urging that the Neck be formally annexed to their town. The influence of these constituted authorities of the neighborhood pre-

vailed, and on June 10, 1726, the Legislature went on record thus: "Ordered that the Prayer of the Petition be so far granted, That the Tract of Land called Wamesit & ye Inhabitants thereon be and hereby are annexed to and accompted as Part of the Town of Chelmsford."

Complete satisfaction appears not to have followed at the Neck since its people two years later petitioned to become a separate precinct. An act to this effect was drawn, but again there was opposition from Chelmsford.

Lobbying against a measure in the Legislature was not very expensive in those days, if one may judge from a payment made in 1730 from the town treasury "To Majr Jones Clark to answer his bill of Expense and time expended about getting the neck Land of from being a precinct 03 -04 -06."

This ended a proposal which, if successful, would have probably made it inevitable that the present city would be called Wamesit, and not by the name of any "outsider" such as, of course, Francis Cabot Lowell was.

One of the prime movers in the petition for separate incorporation of Wamesit was Samuel Hunt, 1657-1743, who dwelt in what was then the northwest corner of Billerica, near the falls in the Merrimack which bear his name. He and some of his neighbors in a section of the town already distant from Billerica Centre, continued to agitate for some kind of separate political and parochial establishment. The success of the residents of Southern Billerica in securing a separate incorporation under the name of Bedford presently led to another movement for secession. On May 13, 1733, petitioners went before the town meeting at Billerica with a request to "erect a meeting house in the center of the town or so to accommodate the northerly part of the town, upon the Town's cost, or set them off, so that they may maintain preaching among themselves."

This petition was rejected, but on December 19 following it was renewed with a request that the town "please to set them off, with two-thirds of the land lying between Andover and Billerica meeting house, from Wilmington line to Concord river, for a township." A committee was appointed to "view the land," perhaps with the idea of saving as much domain as possible to Billerica. This committee reported in favor of the proposal on January 9, 1733-34, and in accordance with its recommendations the town voted "that the northerly and northeasterly parts of the Town, according to their petition, be set off as a Township. Granting them two-thirds of the land from Andover line to our meeting house by a parallel line with said Andover line, extending from Concord River to Wilmington line (if the inhabitants on the southeasterly side of Shawshin River be willing to join with them)."

Having progressed thus far, Hunt and his associates framed a petition to the General Court, "praying an absolute grant of this Court for their being made a Towne within these limits." Finally, on December 23, 1734, the request was approved and the town of Tewksbury was duly incorporated. It took from Billerica about 9,000 of the acres remaining after Bedford seceded. How intimately this town, which later gave up its northwestern corner to Lowell, has been associated with the progress of its urban neighbor is suggested by a mere recital of some of the family names appearing among the petitioners: Brown, Farmer, French, Frost, Hall, Haseltine, Hunt, Kidder, Kittredge, Levestone, Manning, Marshall, Needham, Osgood and Patten. Among these settlers Samuel Hunt was in various ways the most prominent person. He served in Major Jonathan Tynge's regiment in 1702 and participated in the expedition that relieved Lancaster. His house at Wamesit had been used as a garrison house during King William's war, 1689-97, being regarded as the most important station of its kind on the Chelmsford road.

An unsigned article on "Old Houses in Lowell and Vicinity," which was published in the "Star," August 11, 1893, made special reference to the legend of a garrison house in Belvidere:

An interesting relic on the estate of the late John Clark of Tewksbury, about a mile from the Lowell line, is the hearthstone of an old blockhouse which was used in early times as a place of refuge and protection from the raids of Indians who dwelt in this vicinity. These houses were built in every settlement, and must have been especially welcome to the women and children. The upper story projected over the lower part which was strongly barricaded. There were openings in the floor above, so that those inside could fire down upon the intruders if they came beneath with lighted torches to set the building on fire, and also loopholes near the roof which seemed to let in some light and allow another chance of firing upon the foe. A trail led from Hunt's Falls, and here in the corner of the field can be seen the very spot where the cellar was dug. Mr. Clark could remember when it was filled up. The hearthstone is of granite and worn perfectly smooth. The ground is slightly elevated and commands a good view of the surrounding country.

Mode of Living—The manner of life of the farmer people in the three towns under consideration is not so difficult to understand if one realizes that these were settled for the most part by a sturdy prosperous yeomanry of good inheritance and tradition. There was in the eighteenth century practically no lure of the cities drawing from the farms the ablest and most adventurous and leaving at home the dull of wit and feeble of initiative to reproduce their kind. The order of intelligence and morality was relatively high, even though one who looks for them may find evidences of the persistence of lawless and shiftless

strains. Accumulation of property was usual. Old inventories of this neighborhood dispel any notion that the people who farmed on the Merrimack were, after the hardships of the pioneer years were passed, a collection of impoverished strugglers. Conditions of a settled, civilized existence were, in fact, well established before the generation that saw King Philip's war had passed.

Agriculture was, naturally, the predominant occupation. Such former cornfields of the natives as John Sagamore's planting ground at Middlesex were occupied by farmers who quickly developed comfortable financial circumstances. Several houses that date back to the early eighteenth century, or even earlier, still attest the sound construction that was conventional in building at that era. The Coburn house on Varnum avenue, which may have been constructed by the founder of the family in America, has already been mentioned. Its beams have withstood the wear and tear of centuries. Of such sort, too, is the Sewall Bowers house in Wood street, situated originally on the farm of one of the oldest of Lowell families. Of age reaching certainly back to about 1770 is the Varnum homestead, on a lane leading off Varnum avenue, standing on property that has never been transferred by deed since John Webb disposed of these fertile acres to Samuel Varnum in 1664. A boulder on Hale street, in the Ayer's City district of Lowell, marks the site of the historic Old Rock Tavern, which was originally the homestead of the Butterfield family. Reference has been made to the Hildreth house.

The manner of living on the farms was that of the time, with much more of manufacture carried on in the home than is customary in the farm house of to-day. Old inventories give a notion of the equipment of farm and household articles.

Here, for example, is the inventory of the personal estate left by John Varnum, the second of Samuel Varnum's surviving sons, who as its first white child may be called the Peregrine White of Lowell. The list shows what a substantial farmer might easily accumulate in the early eighteenth century. Some of the Jacobean furniture thus listed, needless to say, would to-day be worth almost its weight in silver. After appraising real estate valued at £517 10s. the inventory reads:

PERSONAL ESTATE:

Imprimis:

The sword, staff and apparil of ye Deceased at.....	10- 6-0
His Books 1£ Firearms 3 £.....	4- 0-0
3 Bedds, Bedding, and Belongings thereto.....	12- 5-0
Table Linning and other Linning.....	2- 2-0
4 Tables and 1 dozen chairs.....	2- 0-0
4 Chests, Box and Looking glass.....	2- 8-0
Brass Kettles & other brass.....	1-10-0
Pewter 1 £ Rhum 3 £ 7 s.....	4- 7-0
One pair Oxen 10 £ & 6 Cows & Heffers and a Bull 23 £ 15 s.....	33-15-0
One Horse & 4 Mairs & 1 colt.....	16-10-0

8 Swine, a Cart & things thereunto Belonging also 2 Pair Horse Traises, Chains, Plow Sithes, 2 hons, 31 Axes and span-shackles, Pin Staple & ring Some Syeder all at.....	1-10-0
Credits or Debts owing to ye Dec'd.....	12-10-0
A Piece of Broadcloth & Cotton.....	7- 0-0
	<hr/> 111-180-0

The will of the first Thomas Varnum likewise contains illuminating references to a comfortable manner of living. It contained, among other terms, the following provision :

I give unto my dearly beloved wife all my household goods of what name or demomintation soever, Excepting one Bed with furniture for the same to my youngest son, Thomas, also one cow and one heifer out of my stock of cattle at her own choice, and my white faced mare, and that she be allowed the full use and possession of one end of my Dwelling house at her election and choice, and in case my son Thomas should pull down my now Dwelling House, and build a new one, then to allow my beloved wife full use and improvement of one good and comfortable forerom, and provide her with firewood Winter and Summer.

Slavery in Old Dracut—The labor of working the fruitful farms which were developed on both sides of both rivers was, of course, performed in large measure by the farmers themselves and members of their families. References to hired help are comparatively few; though the man servant was certainly not unknown.

Negro slavery was practiced in Chelmsford and Dracut with hardly a notion of any wrongfulness in the custom. Just when the first black man was brought into the domain that now is Lowell cannot be stated. The institution certainly flourished in Massachusetts, as in other colonies, together with an elaborate system of white slavery (under the name of indentured servants) which has been effectively described by writers who, like James O Neal, are bent on disproving the "golden age" theory of America colonial history.

The black slavery that existed in this part of the world was not, it is fair to assume, of a particularly malignant sort, and it is notable that from hence toward the end of the Revolution came one of the first, perhaps the very first, of the serious challenges of the right of one human being to own the body of another.

Three negro servants at least are known to have been employed on the large estate of Colonel Joseph Varnum, which touched the river about the mouth of Beaver brook. One of these appears to have been born in Tewksbury, perhaps, in the western section that was later annexed to Lowell, for there is on record "a deed of sale by Thomas Farmer & wife of Billerica Mass of one certain negro boy called Mingo, aged nine months old, to Joseph Varnum of Dracutt

1728." In the same gentleman's inventory, made out after his death in 1749, are the following items:

A Neagro man servant named Cuff.....	320-0-0
A Neagro woman servant named Pegg.....	230-0-0

A legend in the Varnum family is to the effect that Cuff was a bright as well as faithful slave. Once while the colonel was engaged in a discussion with a neighbor, so it is related, Cuff, who was standing nearby, was observed to shake his head disapprovingly. His master caught his gesture and asked: "Do you think I am lying, Cuff?" "No, massa," was the reply, "I dossent jest say as I does, but yo' talk mightly lak I does when I isn't speaking de truf."

On Totman street, some time before the Revolution, settled the most famous of early Lowell colored families, the musical Lews.

This family, members of whom were prominent in local music for several generations, had its American origin in Groton, where, as Dr. Samuel A. Green shows in his work on "Slavery at Groton in Provincial Times," a church record of December 28, 1742, has the following entry: Priamus Cap^t Boydens Negro man servant to Marg^t Molatto formerly servant to S. S. both of Groton." Their eldest child Zelah, a corruption of Barzillai, born at Groton, November 5, 1743, was a musician of much native ability, who lived at Chelmsford and in Dracut and was the father of several children who inherited his talent. He was fifer in Captain John Ford's company of the 27th Massachusetts Regiment at the siege of Boston.

Fisheries and Fishing Rights—No sketch of Lowell's colonial period would be complete without reference to the part played by the fisheries at the falls in the economy of living in the towns of north-eastern Massachusetts. Almost everybody, at certain seasons of the year, was a fisherman by avocation. Every farmer's cellar had its flitches of dried or smoked salmon and its barrel of salted fish. From a wide area the farmer folk came to both sides of the river when the fish were running in the spring. The ordinary method of making catches was by means of a long net spread between two boats. As the scows were rowed into shoal water the haul was dragged ashore. It often contained enough salmon and shad to fill the waiting wagon. If less successful the dragging was continued until a good-sized haul was made.

Somewhere about the southern end of the Aiken street bridge the proprietors of the Wamesit purchase at an early date made provision for "a small parsel of Land against ye fishing place Reserved As well for strangers as town dwelers to bait yr horses." This was for many years the rendezvous of the fishermen from Chelmsford and towns further back from the river. Rev. Mr. Allen, who wrote in 1820 while

the fisheries were still uninterrupted by pollution of the streams and the building of impassable dams, gives a specific estimate of the annual catch. "The quantity of salmon, shad and alewives caught in Chelmsford annually," he wrote, "may be computed at about 25 hundred barrel, besides a large quantity of other fish of less value."

The Dracut shore of the "Great Bunt," or bend in the river at the foot of the rapids, was also annually the scene of most active operations. Many shad, according to tradition and the probabilities of the case, turned aside into the darker, more sluggish waters of the Concord. Others, however, continued on, in company with the salmon, to the fork in Franklin, where the soft-water fish made for the waters of Lake Winnepesaukee while the salmon sought the cold brooks of Campton and Woodstock. The alewives, or herring, were innumerable, as in most rivers of New England, when the country was new. They were extensively used as fertilizer. Of eels the lamprey was most esteemed; this fish was a Merrimack river delicacy in comparatively recent times.

From some date early in the eighteenth century a fishing "trust" controlled the annual catch in Dracut. The proprietors of the rights at this place at one time numbered forty-two. The best locations were on the land owned by Colonel Varnum. In 1735 this proprietor and his son, Joseph, Jr., granted to the town "liberty to pass over the land from the county road at the great fishing falls at Pawtucket, reserving a place for catching & curing fish, extending from the place called the lower hole to the Old Bunting Place." Among other contemporary indications of the magnitude of the fishing interests is the particularity with which a proprietor's rights are described in the will of the ever careful Squire John Varnum, which was dated February 1, 1783. In the section of the document devoted to the son Jonas it is stated: "Also $\frac{1}{3}$ part of all my Rights in the Lands at the mouth of Beaver Brook called the Great Bunt sean Proprietors Lands with $\frac{1}{3}$ Right of a small house standing thereon, called the Proprietors' Fish House, with $\frac{1}{3}$ part of my Right in the Great Sean, called the Great Bunt sean, also $\frac{1}{3}$ part of all my rights of the privilege of the fishery at Petucket Falls, and $\frac{1}{3}$ part of all my wharfings, stagings and privilege of building same or setting of Salmon pots or any other fishing at said Falls, also $\frac{1}{3}$ part of Right of diging or making landing at the head of said Petucket Falls or of building mills or making dams and laying lumber at end of passing and repassing from the same for ye improvement thereof." A characteristic springtime occupation of the neighborhood is indicated in an entry of John Varnum's diary of May 14, 1781, in which he writes: "The proprietors of the great sean, Part of them, met to tie on and mend the great net. That is self, Capt Peter Coburn, Jonathan Varnum, Eleazer Coburn, Jonas Varnum, Jabish

Coburn, Tim: Williams, & Timo: Coburn." The diarist, who doubtless superintended the work of getting the big net ready for the spring's dragging, was then seventy-seven years old.

The closeness with which the fishing was regulated, at least theoretically (for there was much poaching), is indicated in a Dracut town meeting resolve of March 1, 1779: "Voted that there should be no Alewives taken in Beaver Brook or ye Brook called Dubble Brook or in Dennisons Brook, only on Mondays Tuesdays and Wednesdays & on those days not to take any in sd Beaver Brook within 30 feet of the sluice ways, for sd fish to go thro the same, and not to Take any in Dubble Brook and the Town-way that leads from Ezra Coburns to Dr. Abbots & Beaver Brook, and that there shall be none taken in sd Dennison Brook between the Town-way easterly of ye old mill called Wilsons Mill & the upper side of said mill."

Not only were the fish caught at the falls used locally, but the fresh salmon, at least, were highly esteemed in Boston. The Merri-mack salmon, indeed, was to the Beacon Hill dame of the late eighteenth century just what the Penobscot salmon was to the frequenters of Faneuil and Quincy markets a century later. An evidence of its popularity may be observed in a note described by Mr. Perham, before the Old Residents' Historical Association, in which Justice Oliver Fletcher, of Chelmsford, as a special compliment, sends to Judge Sewall a nine-pound salmon which "my said Brother dined at his house in Boston." An interesting financial transaction that is recorded in the John Varnum journal reveals a price per pound for the fish which is startling until one recollects that the youth from Dracut who made the sale was paid in the depreciated currency of the Continental Congress. The story, as revealed in the entry, is that on May 7, 1799, "Isaac Parker set out in the evening with Parkers [Parker Varnum's] horse & my horse cart, with about 150 lbs of salmon for Boston one of them being a Fall salmon; the others were from the Salmon Eddy. 8 May. Isaac Parker sold his salmon a 8 s pr lb in Boston. His load came to about 200 \$. He returned about 6 in the eveg. Brought me 3 qts. of best West India Rhum at \$5 and ½ per qt."

Manufactures—Manufacturing in the modern sense of the word hardly existed at or near Wamesit Neck prior to the Revolution, even though the abundant water powers invited utilization. The factory system did not reach New England for several decades after it had begun to upbuild new towns in the English Lancashire. In view, nevertheless, of the turn which the community about the falls was destined to take, special interest attaches to the beginnings of manufacture.

The first white man to be born in Lowell, unless a start is made from Jerathmeel Bowers' distillery, was also its pioneer manufacturer,

for John Varnum, son of Samuel Varnum, whose birth beside the Merrimack has already been described, is recorded as starting a mill. Less is known about this inaugurator of industry than of some of his family. His marriage is of record: "John Varnum of Dracutt and Dorothei Prescut of Groton, were Lawfully mared in Nov., on the 13 day in the year 1700." He was the first town clerk, 1702-13. The cause of his untimely death in 1715 is not known. He was buried in the "Clay Pit ground," called by Major Atkinson Varnum "the Colonial Burying Ground," near where the first church of Dracut was erected.

John Varnum's early manufacturing establishment was a grist mill. This installation, interestingly, was the initial effort to use the water power of Pawtucket Falls. Some time previous to 1710, according to a study of the early grants made by George A. Gordon, Varnum built a wing dam and mill near the foot of the falls just below the present site of the Lowell Textile School. Here some rude stonework was thrown outward into the river in such a way as to create a triangular space into which enough water was forced in ordinary stages of the river to drive the simple machinery of the time. This dam is mentioned in the record of the laying out of a new road in 1710. How long it was in operation can only be conjectured, but doubtless the tradition of its operation led to the prediction of Squire John Varnum, of the next generation, that some day a great manufacturing community would be grown up about the falls.

It should not be supposed, it may be added, that the stonework now visible below the Textile School is a remnant of the old Varnum wing dam. That construction, supposedly, dates only from the Hurd installation of 1825, later to be described. Mr. Hurd, however, conceivably may have been led to build in this place through traditions or even actual relics of the ancient mill.

The first mill of any kind run by water power on the Chelmsford side of Pawtucket Falls was, apparently, a saw mill which Judge Tyng, of Dunstable, erected in the first quarter of the eighteenth century in connection with an old wooden dam of primitive type. Parts of this dam were carried off by freshets from time to time, and replacement was required. One section is known to have been rebuilt about 1778 or 1779 by Joseph Hamblet, of Dracut. The foundation was removed when the present stone dam was built. The mill property later passed into the hands of Capt. John Ford, who had acquired much of the land at the head of the falls, and it became known as Ford's Mill.

Among the early settlers who came from Billerica was Nicholas Sprake (Sprague), who was a clothier by trade. He erected about 1737 a fulling mill on the east side of the Concord river. This was so far as known the first textile manufactory within the confines of

Lowell, unless, indeed, it was on the lower reaches of River Meadow, or Hale's brook, that John Barret, as noted in Z. E. Stone's 1894 paper on "Before the Power Loom," placed his pioneer clothier's mill in 1691.

Church-Going—Religion was relatively a very large element in the life of a colonial community. The inhabitants of Wamesit Neck continued for many years to have their church affiliation with the society at Chelmsford Centre. A very illuminating history of this parish has been disclosed in Rev. Wilson Waters' history of Chelmsford. It only in small part belongs to the story of Lowell.

One should note that after the devoted ministry of Rev. John Fiske, who died in 1676, the Chelmsford people were adequately served by Rev. Thomas Clarke, whose ministry lasted until his death in 1704. On June 26, 1706, choice was made of Mr. Samson Stoddard at a yearly salary of seventy pounds, and one hundred pounds as a settlement. This minister died August 23, 1740, and was succeeded by the Rev. Ebenezer Bridge, whose incumbency lasted well into the presidency of George Washington, specifically until his death, October 1, 1792. The meeting house in which Mr. Fiske first preached was replaced in 1710 with a more commodious structure, which was accepted and paid for by the town in 1712. Here worshiped the families that lived on the proprietary grants at the Neck. Their neighbors across the Concord were at first constrained to make a long pilgrimage to the church at Billerica Centre, but after the incorporation of the new township they had a meeting house of their own at Tewksbury Centre.

The first meeting house for white people to be erected within the confines of Lowell was presumably that which in the second decade of the eighteenth century was built on the pleasant hilly land that borders Flag Meadow brook near the original Varnum and Coburn holdings and not far from the present Lowell general hospital.

On April 11, 1715, so the record shows, "at a general town meeting it was granted to set out meetinghouse for the town of Dracut on a piece of land near the South side of a hill called by the name of Flag Meadow hill on Thomas Varnum's land, bounded as followeth—west by Joseph Varnum's land, north by a highway, Eastward by a stake and stone, and on the South by stake and stones. Also it is granted one barrel of cider and such a quantity of rum as the trustees shall think needful for the raising said meeting house." The minutes of this meeting, authorizing the building of the church with aid from New England rum, are signed by Thomas Varnum, clerk. The description has been accepted as confirming the tradition that the meeting house stood on land occupied for many years in the nineteenth century by Deacon Abel Coburn. The new structure, with dimensions of twenty-five by thirty feet, was started promptly and then

through lack of money and building materials, remained unfinished until the autumn of 1716.

The long list of pastors settled over Lowell congregations is headed by the name of the Rev. Thomas Parker, first minister of the old Dracut church. In the town records of December 28, 1719, it is stated: "At a general town meeting the town made choise of Rev. Thomas Parker as their minister and voted to give him a call to settle at eighty pounds yearly salary. Voted that Captain Varnum, Quartermaster Coburn and Ephraim Hildreth carry the vote to Mr. Parker, and that Quartermaster Coburn be paid six pounds to pay for ye ordination." This committee did its duty, bringing back a formal acceptance, dated January 30, 1720.

The minister thus called to what proved to be a life position at Dracut was nineteen years old. He had been graduated from Harvard College in the class of 1718. His ministry lasted down to the day of his death, March 18, 1765, a period of forty-four years. He was a man of refined, scholarly tastes. Major Atkinson C. Varnum recalls a tradition that he was a musician, with especial fondness for the clarinet and that "sometimes he would sit in his doorway on a summer's evening and play, while the Indians would answer him along the banks of the Merrimack." This legend of the Indian response is open, perhaps, to the objection that red men were no longer numerous along the river. Yet the story is too pretty to be sceptically challenged. In the Woodbine burying ground, off Varnum avenue, Mr. Parker's gravestone still attests, in grandiloquent phrase, his many virtues:

Memento mori

Under this stone is Interred ye Remains of ye

Rev'd Thomas Parker

a gentleman of shining mental Powers, Adorned with Prudence, Benevolence, & Curtesie of maner, a warm & Pathetic Preacher of ye Gospel, a most watchful and tender Pastor of ye Church in Dracut for ye space of 44 years. Accomplished with Learning, Human & Divine, & endowed and adorned by ye social virtues & affections, who departed this life March 18th, 1765, in the 65th year of his age.

The funeral of this first Lowell minister, as recalled in the Hildreth genealogy, "necessitated a journey by William Hildreth to Boston to provide for the funeral; a journey to Littleton 'to get Rev. Mr. Daniel Rogers to attend the obsequies', and the purchase of a coffin: all of which services and expenditures were defrayed by the town of Dracut including an item of £9, 14s. 5d. paid William Hildreth 'for entertaining ministers and horses at the time the Rev. Thomas Parker was called from his work'." Just before the funeral a special town meeting was held, with John Varnum as moderator, at which it was voted: "1st to buy Madam Parker a mourning suit, 2nd, to buy six

wigs for ye bearers of ye deceased, 3rd, to appropriate 20 pounds for ye mourning suit and wigs included, 4th, to raise four pounds more, so that ye whole amount to 24 pounds."

The "ministree" where Rev. Mr. Parker lived was about half a mile above the oldest Lowell meeting house, at the corner where Colonel Louis Ansart later resided. Already during his ministry the original church had been outgrown, and an agitation was begun which finally removed the centre of the town to its present location, just over the Lowell line, in the Centralville district. It belongs to the historian of Dracut rather than of Lowell to reproduce in detail the acrimonious discussions that accompanied the successful efforts of the people of the eastern part of the elongated township to place the church where it is still known as the Old Yellow Meeting House.

A decision of 1745, after much discussion, was as follows: "Voted to build a meeting house for ye public worship of God 45 feet in length and 35 feet breadth and 23 feet between the plates and sills—clap boarded with sawed clapboards and shingled with white pine shingles, and the windows shall have sash and glazed with glass called ye large square glass." The structure thus built had twelve square or box pews arranged around the sides and in the gallery. In the centre were long benches for the common folk—those whose means did not permit them to rent pews.

In 1793 it was voted "to build a house of the same bigness as the one in Pelham." Meeting after meeting was held to determine the location. The geographical centre of the town was finally decided upon and the church was erected on the "centralline" in 1794; though an opposition erected another church some half mile to the westward.

Manners and Customs—Glimpses of the everyday life of the forefathers of the city that is, may be obtained from various data. Not a few entertaining records were unearthed a generation ago by Mr. Perham in one of his papers read before the Old Residents' Historical Association. Some of the most illuminating of these details concern the funeral of Benjamin Parker, ancestor of a family since prominent in Lowell and one of foremost military men of his time. Lieutenant Parker died in 1771 and was buried from the family mansion on Pine street. There is preserved among other records a bill for gloves and other mourning articles which gives a sense of the elaborateness of costuming in those supposedly simple days; the merchant who sold the goods was a Harvard graduate, long settled at Chelmsford Centre. These are the items:

Mr. Benj. Parker to Samson Stoddard Dr.

1771.
May 23—To 15 pr. mens Gloves
 To 2 pr. mens Black Ditto
 To 19 pr. woms Ditto

To 3 pr. woms Black Ditte
To 3 Vails
To 1 yd. Black Ribband
To 3 yds. hat band Crepe

Do Mr. William Peirce for the Funrl of Lieut. Benja Parker Late of Chelmsford Deceased.

A list of the mourners at this funeral is also reported by Mr. Perham, together with some information concerning their places of residence. It is known, for example, that Lieutenant Joseph Moore (who died July 5, 1775) lived on Moore street. Joseph Peirce dwelt on what is now the City Farm. He was a tailor whose fine workmanship was in high esteem throughout the district. "The Peirces were a long-lived race," says Mr. Perham. "Of the children of Joseph, the eldest, Silas, outlived five wives, leaving the sixth a widow at the age of 84. Joanna was cut off by an accident at 90. Sarah died at 98 and Thankful lived to reach her 100th year." Understanding of the fatalism of heredity, as regards longevity, it may be added, is needed to counteract the impression that might be given by such statements as the semi-jocular one made by Mr. Perham: "The head of this remarkable family was addicted to intemperate indulgence in drink—we are not informed as to the brand he used." The property was ultimately acquired for the city farm from Joseph Peirce, son of Silas.

Another Peirce house of the neighborhood was that originally occupied by Stephen Peirce, who, as before recorded, was refused admission to the Legislature on the ground of his not being a legal resident of Chelmsford. The location is denoted by a reference which says that it was between Captain Isaac Chamberlain's and Samuel Marshall's houses. The former of these has been identified as at Jenness place, on Chelmsford street, and the other as on the present Parker street. This Peirce residence was historically interesting in that it was the early home of General Benjamin Peirce, father of President Franklin Pierce.

The most vivid word pictures of the time that have come down to us are undoubtedly those contained in the journal of Squire John Varnum, 1704-1785, from which several citations have already been made. This community leader, a grandson of the original settler, is characterized in the Varnum geneology as being the "most prominent man of his day in North Eastern Massachusetts;" he quite certainly was the foremost person living within the Lowell boundaries on either side of the river. Owning much property to the north of Pawtucket Falls, personally much concerned in the valuable fishing privileges of the place and foreseeing the extension of manufacturing which he had already begun on a small scale at the foot of the falls, he is surely entitled to be named, if not among the "city fathers," at least among

the "city grandfathers." His anti-slavery convictions marked him as one who was intellectually well in advance of his age.

Like many of the young men of this region, John Varnum had a taste of military service at the time of the celebrated Lovewell fight. In 1725 he was one of the company led northward by Captain Lovewell. Tradition has it that either on the way forward or back the Dracut boys stayed at a tavern in Andover kept by Joseph Parker and that there young Varnum fell in love with the landlord's daughter Phebe, whom he married. His civic services were many. He was town clerk during the years 1726-1729 and 1735-1742. In 1741 he headed a committee to protest against a new running of the boundary line between Massachusetts and New Hampshire, which would have thrown much of his own land into the latter State. In 1767 he was chosen justice of the peace. During the Revolution he was a member of a precautionary committee formed under the General Court's "Act for taking up and restraining persons dangerous to the Commonwealth," and in the last years of his life, 1782-85, he belonged to the "Commission to sell forfeited Estates." The accidental discovery of a diary which he kept during the later years of the Revolution was an event of considerable historical significance.

Various writers, Mr. Howells one recalls as among them, have contended against the popular notion that life was acrid and monotonous in colonial New England. They point to many vestiges of old-time sociability and urge that the generations before the Revolution knew at least as jovial a life as those whom the Washingtonian temperance movement and other reforms profoundly influenced in the nineteenth century. One certainly might select items from John Varnum's diary to support this opinion.

Already an old man, this distinguished resident of the western section of Dracut took keen interest in family gatherings with their feasts, at which the fatness of the land was brought forth. Here is his story of a dinner party of February 5, 1777:

Hezekiah Colburn and wife, Jos. Varnum, Jr., and wife, Abiah Hildreth and wife, Polly Parker and Polly Gault, dined with us on a Bread Pudding, a Corned Leg of Pork, a Bresket, &c., a Rost shoulder of Pork, a Line of Mutton, &c., Rost Turkey, tost and Cheese, &c. Jacob Tyler, Jr., and his sister Lydia and Mr. Henry Ingalls, Jr., from Andover here on a visit in the afternoon. In the evening there came in a number of young folks on son Jonas' invitation, so as to make the number 32. Had a pleasant evening. The said Company stayed and supt of a cold supper, stayed late.

Something, again, of the jingle of old-time sleighing parties seems to echo down the years from the following terse description of a sleighride followed by a dance:

15 Jan. [1778]. About 2 of ye Clock the company viz: Hezekiah Coburn and wife, Parker Varnum and wife, Roger Ray and Hannah Brown, Henry Coburn and Samuel Richardson, Samuel Coburn and Rhoda, Jonas Varnum and Polly Parker, John Parkhurst, Isaac Parker, Abijah Hall and Bradstreet Coburn set off in three double shays to go to Billerica, went as far as Capt. Miniers. Took a drink of Flip and toddy and returned through the town. Git here about Sun setting. The Company set off for Joseph Varnum's to sup there with fife and fiddle and returned home at about 2 a. m.

What was danced, what imbibed on so festive an occasion, can only be conjectured from general knowledge of the customs of the period. Two other records of simple, harmless pleasures of the time may be added to the exhibit. These were happenings of March 4, 1779:

Parker had a great entertainment. Mr. Brown & his wife Rhoda, Elijah Fletcher & wife, Michael Hildreth & wife, Phillip Parker & wife, Bradley Varnum & wife, Capt. Peter Coburn & wife, Doctor Little & wife, Nathan Parker & wife, Jonas Varnum & Polly Parker, Isaac Parker & Abijah Hill and myself & wife, all dined & supped here. Jonas & Polly went to a Dance the same evening at Abijah Fox's. Henry Coburn, Thomas Varnum, Bradstreet Coburn & a large number of young people went to the sd Fox's to the Dance there that evening.

10 Dec. 1779. Thos. Varnum had a Dance at his house in the Evg. as the same fell by lot there.

Settlement of Bay State Boundaries—Throughout the century which elapsed between King Philip's war and the Declaration of Independence the population of the then rural neighborhoods about Pawtucket Falls must have increased steadily, but without any marked influx of new settlers. The same family names occur again and again in the town records. There was no problem of alien immigrants, though the story of the coming of several Acadian refugees has been graphically set forth by Mrs. Griffin.

The precise population in the pre-Revolutionary era of the territory later to be occupied by the city of Lowell can at no time be stated accurately. That of the entire constituent towns, indeed, was not determined with any considerable thoroughness until the census which was begun by decree of the General Court in 1763 and finished in 1765. Previously, in 1707-08, a poll census had given the number of qualified voters in the three townships as follows: Chelmsford, 137; Billerica (this being prior to the partition of Tewksbury), 140; Drawcutt, 15. This enumeration occurred, of course, before the creation of a separate parish at Pawtucket Falls. By the date of the first regular census in Massachusetts it is probable that Dracut, whose main activities and the bulk of whose population were still west of

Beaver brook, had more householders dwelling within the present confines than could have been numbered in either adjacent town on the south side of the river. No return, for some unexplained reason, was made from Dracut in the 1765 census, though an unofficial estimate in Joseph B. Felt's study, published in the collections of the American Statistical Association, gives the probability as about 1,000. Chelmsford, at this later census, had a white population of 997; Tewksbury, 776. The Commonwealth was found to contain somewhat more than quarter of a million people.

In what jurisdictions the Merrimack river communities belonged was not authoritatively decided until long after the first grants of land had been made and settlements effected. An assignment of Chelmsford and the farms over the river in Dracut to Middlesex county was made by act of the Legislature in the following terms:

Upon information of sundry farms erected above the towne of Chelmsford, about Merremack River, whose inhabitants pretend their sejd farmes to be out of the county of Midlesex, & possibly not conteyned in any county, it is therefore ordered by this Court & the authority thereof, that al & every the inhabitants of such ffarms as these are or shall be improved shall, in all parts, have their dependences upon & perform service, & beare chardges with the sajd towne of Chelmsford, & that the sajd ffarmers repaire to the Courts of Midlesex for justice, & all, till this Court take further order, any lawe or custome to the contrary notwthstanding.

Regarding the ancient and complicated boundary disputes, which might have been settled in such a way as to divide the present city of Lowell between the States of Massachusetts and the Granite State, Kimball Webster, in his history of the town of Hudson, New Hampshire, has a summary which tells practically all that is needful to be known. The basic fact was that on March 19, 1627-28, the Plymouth Council, without knowledge of the real direction taken by the stream, granted "to Sir Henry Roswell and associates the land between the Charles river and the Merrimack rivers and, in addition all lands "which lye * * * within the space of three English miles to the northward * * * of the Merrimack."

This grant, with its possibility of controversy made certain by the north and south direction of the river from its source down to the "Great Bunt" at Lowell, was confirmed in 1630 in the charter given by King Charles I. to the Massachusetts Company.

As New Hampshire was settled and its townships began to grow up on the west side of the river the demand to know just how far north Massachusetts extended became persistent. Nothing was determined until March, 1740, when a memorable arbitration conference was held in London, at which Massachusetts was represented by Ed-

mund Quincy and Richard Partridge; New Hampshire by Captain John Tomlinson. It was decided that whereas in the old grant "the course of the river, though unknown, was supposed to be from west to east," proper surveying had proved that it would have been "inequitable to have constructed the Massachusetts grant" and that therefore "it was determined: that the northern boundary of the Province of Massachusetts be, a similar curve line pursuing the course of Merrimack river, at three miles distance, on the north side thereof, beginning at the Atlantic Ocean and ending at a point due north of Pawtucket Falls; and a straight line drawn from thence due west, till it meets with his Majesty's other governments."

This decision of 1740 was regarded as substantially a victory for New Hampshire. It at the same time removed for all time the possibility that Dracut, Methuen and the other Bay State townships north of the river would ever be allocated to the Commonwealth with which they seemed, and perhaps still seem, logically to belong. The three-mile line from the mouth of the river westward was duly run by George Mitchell, surveyor, as far as the designated "station north of Pawtucket Fall in the township of Dracut." Thence Richard Hazen took up the tape and carried the line over the river through Dunstable and westward as far as the boundary of New York. Some slight errors made by these surveyors have been rectified in our own time.



CHAPTER V.

East Chelmsford and West Dracut in the Revolution.

The new social spirit that was evoked in Massachusetts just before and during the American Revolution is more significant, in a retrospect of Lowell history, than any listing of Bunker Hill participants from this neighborhood or any data of pensions granted to veterans of the war.

The economic causes of the revolt from the mother country are, of course, to be found in the increasing prosperity and stability of just such communities as those of West Dracut and East Chelmsford on opposite sides of the "Great Bunt" of the Merrimack river. Within a century a distinctive social order had been formed, one tending to grow apart from, in essential respects, its English model. The mother country, especially when governed by a Tory ministry, was peculiarly inept at understanding the temper of such men as John Ford, of Chelmsford, and John Varnum, of Dracut, representatives of an aggressive leadership which had been created by force of character in the erstwhile feeble colony.

The British ruling and mercantile classes for a long time had taken it amiss that they should meet with competition, commercial and political, in the overseas colonies. From the date of the discovery of America onward, the New World had been regarded in Europe as primarily a field of profitable investment. As the English colonies grew populous and, to some extent, affluent, the home government became concerned with preventing the upgrowth of just such industries as later appeared at the various water powers on the Merrimack. "In 1750," writes James Oneal, in "The Workers in American History," "Parliament passed acts prohibiting the erection of any mill or engine for slitting or rolling iron or any plating forge or any steel furnace. Hatters were not allowed to take more than two apprentices at a time or any for more than seven years. It was made illegal to manufacture hats or woolens in one colony and sell in another. These laws were generally violated by resorting to smuggling."

Pre-Revolutionary protests against the usurpations of the London government were by no means confined to the coast towns, whose trading classes were most directly affected. The attitude of the country was generally one of cordial support to every policy of resistance. In this regard the towns under consideration were certainly not exceptional. During the agitation concerning the stamp act of 1765, Chelmsford's declaration of rights was made through a special town meeting in the form of instructions to Colonel Samson Stoddard, then



PAWTUCKET FALLS.
Water Development of 30,000 Horse-power Daily.

the town's representative in the General Court. Here is the well expressed resolution :

This being a time when, by reason of several acts of Parliament, not only this province, but all the English colonies of this continent are thrown into the utmost confusion and perplexity: the Stamp Act, as we apprehend, not only lays an unconstitutional but also an insupportable tax upon us, and deprives us, as we humbly conceive, of those rights and privileges to which we are entitled as free born subjects of Great Britain by the Royal Charter: wherefore we think it our duty and interest at this critical conjuncture of our public affairs, to direct you, sir, our representative, to be so far from countenancing the execution of the aforesaid Stamp Act, that you use your best endeavors that such measures may be taken and such remonstrances made to the King and Parliament, as may obtain a speedy repeal of the aforesaid act, and a removal of the burden upon trade.

This attitude of consistent support of the protesting leaders of public opinions in Boston, Salem and other seaports of the Commonwealth was maintained in Chelmsford throughout the period of agitation. Colonel Stoddard was sent as a delegate to the convention in Boston called in the name of the Committee on Safety in September, 1768. Among the town meeting records of a national interest, this was adopted unanimously on January 22, 1773:

We are fully of opinion that the inhabitants of this province are justly entitled to all the privileges of Englishmen, and to all those rights inseparable from them as members of a free community. We are also sensible that some of these rights are at present endangered. In such unhappy circumstances the only question that can be made is this: What method is most suitable to obtain redress? Whatever doubts may arise about a particular mode, this we are clear in, that all rash, unmeaning, passionate procedures are by no means justifiable in so delicate a crisis. When a community thinks any of its rights endangered they should always consider consequences, and be very cautious lest they run into a step that may be attended with the most deplorable effects.

In a somewhat similar style, a little verbose after the manner of the day, but determined in tone, instructions were drawn up for guidance of Representative Simeon Spaulding.*

Early Life of General Joseph B. Varnum—While Chelmsford men were thus considering the problems of their future relationship to King and Mother Country, the same subject was deeply agitating a stripling of the Varnum family over the river. Military leadership in Dracut was destined to be vested for the entire war of the Revolution, and for many years afterward, in a grandson of Colonel Joseph Varnum, and son of Major Samuel Varnum. The time of the Stamp Act agitation coincided with the beginning of the illustrious services ren-

* Lowell Spaldings to-day have all dropped the "u," but in the old records we sometimes find it, sometimes not.—Author.

dered to his town, State and Nation by Joseph Bradley Varnum (1750-1821), who subsequently became a major-general in the Commonwealth's service, who represented the Northern Middlesex District in the National House of Representatives, of which he was Speaker for two terms, and who had the honor during his one term of service in the United States Senate of being in 1814 its President and Acting Vice-President of the United States. So intimately is the name of this soldier and statesman connected with the early history of the Lowell district, and so illuminating are his reminiscences, dictated in 1819 and published in 1888 in the "American Magazine of History," that these vie in local interest with the John Varnum journal already referred to as a source book of the period.

The manner of General Varnum's narrative, which runs in the third person, is sometimes tinged, it may be said parenthetically, with the pomposity of the early days of the Republic when almost everybody wrote and spoke in formal and solemn periods. It is, nevertheless, a transparently sincere and very human document. Without much reading between the lines one gets from the earlier parts of it a vivid picture of a born commander of men, who as a boy so far foresaw the impending revolutionary struggle that while others were absorbed with their daily tasks and fun-making, he was accustomed to take every possible occasion to visit Boston and study the methods of military training used among the royal troops. It reveals a young man, just married, who when the outbreak of hostilities was generally perceived to be inevitable was so much better informed than any of his neighbors regarding drill and discipline that he was chosen captain over the heads of much older and more experienced men. His narrative will bear quotation at several points in this history. The autobiography states:

Joseph Bradley Varnum, son of Major Samuel Varnum and Hannah Mitchell, was born in Dracutt January 29th old stile, or February 9th new stile 1751: his father and mother buried their three children who died in childhood; afterwards they had four sons, Samuel, James Mitchell, Joseph Bradley and Daniel, and five daughters who all lived to be married. James Mitchell had a collegiate education: the rest of the family were brought up together with the scanty opportunity of schooling which was offered to the youth of that time in the town of Dracutt; and the opportunity was indeed scanty.

At the age of fourteen, young Varnum was already evincing these qualities of foresight and personal initiative which were later to make him easily the most eminent person of Northeastern Massachusetts.

In the year 1765 the account recalls:

When the famous Stamp Act passed the British Parliament and became a law, and a principle of liberty and patriotism was raised in

his breast, although then quite a youth, he applied himself to the study of the various systems of government in the world, and especially to the propriety or impropriety of the measures which had been taken by Great Britain towards America, which by no means lessened his opposition to the Stamp Act, nor was he much elated when the repeal of this obnoxious act in 1766 took place, when he considered the circumstances and principles in which the repeal was effected. * * * While the British troops were in Boston, transported thither with an original design of enforcing submission to the mother country, a military ardor glowed in his breast, and with a view the better to enable himself to become useful in the defence and in anticipation of the independence of his country, he, in an isolated and apparently obscure situation, visited the British troops in Boston from day to day, for some time: after what he had acquired from that source he applied himself to the study of the most recent and approved authors upon tactics and military discipline, by which he acquired many of the elements of discipline necessary to be possessed by the soldier.

This intensive preparation of young Varnum's was undoubtedly in large measure responsible for the active part which the men of Dracut took in the war that followed. "The massacre committed by the British soldiery in 1770," he wrote, "seemed to rouse every latent spark of the love of liberty and independence which had for some time apparently laid dormant in the breasts of the inhabitants of that town." Previously there had been but one military company in the place. Now it was proposed to form two companies after the model of the royal military organization, "and although at that time, according to the views of the people generally, Joseph Bradley Varnum was but a boy and quite too young to be intrusted with military command, yet having been acquainted with his manners and disposition and learned something of his military acquirements, they unanimously made choice of him for their captain." Under this captaincy, drills were carried on regularly in the years just preceding the armed conflict. It is recorded that "they went on harmoniously, frequently meeting for discipline, and making as much progress therein as the nature of the case would permit, until December, 1774, when the Provincial Congress thought proper to continue the royal arrangement of the militia into regiments and companies as the best adapted rule of procedure under existing circumstances."

While the Dracut men from Scarlet Brook to the Nickel mine, and from the Christian Hill to Black North, were thus busily preparing for eventualities, their young captain was not neglecting the citizen's duty of developing a farm and building up a family. "In the year 1769," he writes, "he for the first time became acquainted with his present beloved wife, that acquaintance was continued until the 26th day of January, 1773, on which day they entered into the holy bonds of matrimony, and on the 4th day of February following, they

commenced the station of housekeeping at Dracut. She was the daughter of a respectable farmer in Pelham, New Hampshire, by the name of Jacob Butler."

Thus was brought into the wartime activities of Dracut, Molly Varnum, after whom is named one of the Lowell organizations of patriotic women, the Molly Varnum Chapter of the Daughters of the American Revolution. This woman, a granddaughter of Deacon John Butler, who went from Woburn to Pelham and whose descendants are many throughout the Nation, was one of the many heroines of the difficult time into which the colonies were plunged by their effort to secure political independence. As General Varnum wrote of his consort: "Notwithstanding the cordiality and friendship which has uniformly pervaded both their minds toward each other since their first acquaintance, they have been called upon to sustain many grievous trials and afflictions which required Christian fortitude to sustain. For the first nine years of their dwelling together nothing unusually grievous occurred except the loss of a darling daughter eighteen months old, while he was absent in the army." Elsewhere the husband affectionately records the wife's devotion to the revolutionary cause. "Through the whole of this struggle he had the consolation of the accordance of his beloved wife: when soldiers were called upon to go into the service who were not possessed of blankets, her feelings induced her to supply them to the best ones she had; when they wanted sheets or knapsacks she furnished them by cutting up her sheets even to those of her own bed, relying on divine Providence for strength to manufacture more in their room."

The home which General and Mrs. Joseph Bradley Varnum made for themselves amidst the trials of a great war was situated on what is now Lawrence road, about three miles below Centralville. They thus cannot strictly be claimed as residents of the Lowell that was to be. So closely, nevertheless, were they identified with the development of the district which General Varnum later represented in Congress that frequent citation from the autobiography will not transgress the limits set upon this work of narrative and compilation.

In the years following the Boston massacre, it began to be evident that such prevision of trouble as young Joseph Bradley Varnum had experienced was no hallucination. In August, 1774, in response to a call to be represented at a provincial meeting at Concord, Chelmsford nominated as its delegates Jonathan W. Austin and Samuel Perham. At the meeting the former representative of the town was one of a committee "to consider the late acts of Parliament." The report which was duly rendered is a long one, resounding with what John Fiske calls the "effort to defend the eternal principles of natural justice." It ended by declaring that "a Provincial Congress is absolutely

necessary in our present unhappy situation." Said the eloquent peroration: "Our fathers left a fair inheritance to us, purchased by a waste of blood and treasure. This we are resolved to transmit equally fair to our children after us. No danger shall affright, no difficulties intimidate us; and if, in support of our rights, we are called upon to encounter even death, we are yet undaunted, sensible that he can never die too soon who lays down his life in support of the laws and liberties of his country."

To the several Provincial Congresses which succeeded the Concord meeting and which determined many projects of moment to the Nation that was then in formation, all the towns of the Lowell neighborhood sent able and public-spirited representatives. At the Provincial Congress of Deputies which convened at Salem, October 7, 1774, Chelmsford was represented by Simeon Spaulding, Jonathan Williams Austin and Samuel Perham; Dracut by William Hildreth; Tewksbury by Jonathan Browne; Billerica by William Stickney and Ebenezer Bridge. The second Provincial Congress of Deputies was convened at Cambridge, February 1, 1775. Among the deputies were these: Chelmsford, Simeon Spaulding; Dracut, Peter Coburn; Tewksbury, Jonathan Browne; Billerica, William Stickney. The third Provincial Congress met at Watertown, May 31, 1775. Here again Chelmsford was represented by Colonel Spaulding. Dracut sent Deacon Amos Bradley; Tewksbury, Ezra Kendall; Billerica, William Stickney.

As the crisis approached, Chelmsford held a town meeting at which it was voted to supply equipment to all men on the alarm list and to have ready for active service at least fifty minute-men. The meeting also appointed a committee of inspection to prevent the sale in Chelmsford of any articles imported from Great Britain. The people over the river were equally awake. A Dracut committee of correspondence, inspection and safety was formed on January 12, 1775, "for the purpose of communicating and securing an interchange of views upon the great questions which are agitating the public mind." This organization was effected nineteen days before the assembling of the Provincial Congress at Cambridge. A committee of townsmen was appointed to "examine and report upon the quantity, nature and condition of military stores and ordnance material, arms and equipment on hand or obtainable, for any great emergency. Report regarding same to be made to town." Four months later the Dracut records show that twelve pounds were appropriated for bayonets, lead for bullets and flints for muskets. This equipment was placed in the hands of minute-men subject to training half a day each week for ten weeks, "unless the last act of Parliament, the Boston Port bill, shall be repealed."

The Lexington Alarm—"The Civil War was begun at Concord this morning," wrote the Rev. Ebenezer Bridge, of Chelmsford, in his diary of April 19, 1775. "Lord divert all things for his glory, the good of his church and people, and the preservation of British Colonies, and to the shame and confusion of our oppressors."

The alarm summons reached Chelmsford at about 7 o'clock on the morning of the 19th. Messengers were despatched over every road to warn the militia and minute-men of the town. The first man who may be called a pre-Lowell citizen to receive the news was, according to data contained in a paper prepared by George F. O'Dwyer in 1899 for the Father Matthew Temperance Association, Deacon Aaron Chamberlain, a soldier of Captain Barron's company, who lived on the old turnpike road near the site of the present city farm. Captain John Ford was among the first to be notified in the vicinity of Pawtucket Falls. In a short time every soldier of the Neck was on his way to the rendezvous at Chelmsford Centre.

A story has it that on that fateful morning when the people of the Centre and the Neck were thus aroused by ringing of bells and firing of alarm guns, the godly pastor endeavored to round up the minute-men for a brief service of prayer in the meeting house; but that Captain (at that time Sergeant) John Ford, impatiently pronounced against any such waste of time and hurried his men toward Concord.

Certain it is that Chelmsford men went out in two companies, one under Colonel Moses Parker, the other under Captain Oliver Barron. These companies reached Concord in time for some of the fighting. Among the wounded were Captain Barron and Deacon Aaron Chamberlain. Captain Davis and Abner Hosmer, Acton members of the company, were killed at the bridge. The sense of exaltation which this event at Concord produced in Chelmsford is reflected in an entry of April 20 in Mr. Bridge's diary. "We are now involved," he wrote, "in a war which Lord only knows what will be the issue of, but I will hope in His Mercy and wait to see His salvation."

The two Dracut companies, coming from a greater distance, arrived too late for the fight at Concord bridge, but joined in the pursuit of the British troops back to Cambridge.

Five men of Chelmsford achieved especial distinction at the beginning of the Revolution, two of whom, Captain John Ford and Benjamin Pierce, lived in the portion of the town since occupied by Lowell. The other three were Colonel Simeon Spaulding, Colonel Ebenezer Bridge and Lieutenant-Colonel Moses Parker.

Colonel Spaulding, a descendant of Edward Spalding (Spalden or Spaulding as it was variously spelled) who settled at Braintree about 1632, and who in 1655 was one of the first settlers of Chelmsford,

was in his sixty-second year when the war began. His residence was at Chelmsford Centre. "In civil matters," writes C. C. Chase, "he was doubtless the first and most influential citizen of Chelmsford in the great crisis of the Revolution." He had already been town treasurer, 1755-66-67; selectman, 1761-62; and on March 18, 1755, had been commissioned cornet of the Second Regiment of the Provincial Militia. He became colonel during the Revolution. He was in the American camp at Cambridge on the day of the Bunker Hill battle. He represented Chelmsford in the Legislature in 1770 and again in 1773 and 1774. In September, 1775, he was appointed justice of the peace. He was a member of the Committee of Safety in 1775-76. Later, in 1779, he was a delegate to the convention which framed a Constitution for the State of Massachusetts. He died April 7, 1785. Through his son, Weld Spalding, and his grandson, William Barry Spalding, he counts as one of the forefathers of Lowell.

Colonel Parker, who was a veteran of the French and Indian wars, fought at Bunker Hill. He was wounded in the leg, was captured by the British, and died on July 4, 1775, in consequence of an unsuccessful, and perhaps unskillful, amputation of his leg.

Colonel Bridge was a son of the Rev. Ebenezer Bridge, minister at Chelmsford, where he was born April 29, 1744. A graduate of Harvard College, he taught school for a time, and then opened a store at Billerica, whence the inclusion of his name in the records of that town at the beginning of the war. In 1775 he was chosen colonel of the Twenty-seventh Massachusetts Regiment. He died at Hardwick, New York, in 1814.

Captain John Ford—The great man of the East Chelmsford settlement at Pawtucket Falls throughout the Revolution was John Ford, mill owner, capitalist and military personage, a native of Haverhill, where his birth was recorded as of November 6, 1738. His father, Robert Ford, is supposed to be identical with the Robert Ford who was in Lovewell's fight. A legend perpetuated by several historians has it that John Ford as a youth was himself a dauntless foeman of the redskins and that after he had come to Pawtucket Falls and begun operation of a mill, a revengeful Indian appeared and threatened his life, only to be seized by the white man, killed and thrown into the rushing tail race. As there are several versions of this story, it may, perhaps, be accepted as based on fact, though one suspects the Indian in the case to have been one of the survivors of the friendly Wamesits, who down to the end of the eighteenth century earned a precarious living by assisting the passage of logs around Pawtucket Falls, and that New England rum rather than long cherished vengeance probably supplied the motive for the attack.

Just when John Ford's removal from Haverhill took place appears not to have been determined, but it is established that "before the Revolutionary War, Captain Ford was engaged in a large range of business. He owned a saw mill at the foot of Pawtucket Falls, near the mouth of the Concord river, and his account book shows that he dealt largely in planks, boards and other kinds of lumber. He also kept a store, furnished with a variety of West India and other goods. From 1771 to 1782 he sold a great amount of lumber to Timothy Brown, who built and occupied as a tavern the celebrated 'Old Yellow House' in Belvidere."

John Ford, as has already been indicated, went to the Concord fight in the capacity of a sergeant of the minute-men. He arrived just too late for the contest at the bridge, but was among the colonials who harrassed the royal troops on the way back to Boston. In the rear-guard action at Hardy's Hill, he displayed conspicuous daring, such that Gordon, in his "History of the American Revolution," writes: "It can be fully proved that Captain Ford killed five regulars."

A fifth man of later fame, whom the stir at Lexington and Concord brought forward, was Benjamin Peirce or Pierce, then a youth of eighteen years, living with his uncle, Robert Pierce, on what is now Powell street, Lowell. Young Pierce, the story goes, was ploughing with a pair of steers when the news of the British invasion reached him. As no horse was available he set out on foot for Concord, arriving too late for the fight. He continued his walk to Cambridge and enlisted in Captain Ford's company. He was at Bunker Hill and remained in the service in Colonel John Brooks' regiment. After the Revolution, he left Chelmsford and settled on wild land in Hillsborough, New Hampshire. He rose to be Governor of that State and his son, Franklin Pierce, became President of the United States.

Battle of Bunker Hill—Large contingents of men from the farms now covered by Lowell fought at Bunker Hill in the companies of their respective townships. In the steps taken to raise money and enroll troops, Chelmsford, Tewksbury and Dracut all adopted patriotic action and sent their respective companies to join the force that accumulated in front of the English army at Boston.

Colonel Ebenezer Bridge, already mentioned, commanded one of the regiments which undertook to occupy the heights in Charlestown. Soon after the events of April, 1775, John Ford, foremost citizen of the Neck, undertook to raise among his neighbors a company for service in the provincial army. Of this force he was chosen captain. His company, as it marched to Cambridge to be enrolled under General Ward, was composed more largely than probably any other of ancestors of Lowell people of the present generation. Its membership was as follows:

Captain, John Ford; lieutenant, Isaac Parker; ensign, Jonas Parker; sergeants, Moses Parker, Daniel Keyes, Parker Emerson, Jonas Pierce; corporals, John Bates, Benjamin Barret, William Chambers, William Cambill; drummer, William Ranstead; fifer, Barzilla Lew; privates, John Keyes, Alexander Davidson, John Chambers, Samuel Britton, Moses Barker, Benjamin Pierce, David Chambers, Ebenezer Shed, Samuel Wilson, Nathaniel Foster, James Dunn, Isaiah Foster, Benjamin Parker, Benjamin Farley, Enoch Cleaveland, Benjamin Butterfield, Samuel Howard, Moses Esterbrook, Robert Anger, Elijah Haselton, John Glode, Jesse Dow, Joseph Spalding, Francis Davidson, Oliver Cory, Samuel Marshall, Joseph Chambers, Nathaniel Kemp, Joseph Spalding, Solomon Keyes, Isaac Barrett, Noah Foster, Reuben Foster, Jonas Spalding, Timothy Adams, Josiah Fletcher, John Parker, James Chambers, William Rowel, Silas Parker, Benjamin Haywood, Robert Richardson, Thomas Bewkel, William Brown, James Alexander, Solomon Farmer.

In Dracut the course of young Joseph Bradley Varnum's military ambitions did not run smoothly in this early period of the war. His temporary retirement to the ranks appears, however, to have been accepted in good part even though it prevented his name from being prominent in the list of those who went against the British at Concord Bridge and Bunker Hill. The former captain's narrative of the happenings of the spring of 1775, as they effected him, is a model of circumspect reminiscence:

The volunteer companies in Dracutt being attached to good order and government, reassumed their standing as private soldiers, and the whole company thus again collected made choice of Stephen Russell as captain, Ephraim Colburn as first lieutenant, Simon Colburn as second lieutenant and Abraham Colburn as ensign. These were all respectable gentlemen considerably advanced in life, but all of them almost totally uninformed in tactics and military discipline. In order to acquire a degree of necessary information in the military art they employed the said Varnum as an instructor, both to themselves and the militia under their command, in which capacity he continued to serve them until after the commencement of the Revolutionary War, without fee or reward, while he continued in the honorable station of a private soldier in the said company, and as such marched with Captain Russell to the battle of Lexington which took place on the 19th of April, 1775, and upon various other occasions of alarm throughout the year 1775, and until the British troops evacuated the town of Boston, on the 17th of March, 1776.

The second Dracut company of this time was commanded by Captain Peter Coburn (1737-1813), who lived in a house still standing on Totman street, near where it joins Mammoth road, near Collinsville. This company was among those concerned in the Concord fight and, after seven days' service, was disbanded. When a few weeks later the men were again called out, Captain Peter Coburn was in command, taking an important part in the battle of Bunker Hill.

Tewksbury, too, was well represented in the American forces besieging Boston. Most of the minute-men from this town were enrolled either under Captain John Harnden, of Wilmington, or Captain Benjamin Walker, of Chelmsford. Of Tewksbury, in the Harnden company, were: John Burt, William Harris, Joshua Thompson, Moses Gray and Samuel Manning. In Captain Walker's company were: Lieutenant, John Flint; sergeants, Luke Swett and Eliakim Walker; corporals, Philip Fowler, David Bayley and Peter Hunt; drummer, Phineas Annis; fifer, Isaac Manning; privates, John Bayley, Jonathan Beard, John Dutton, Amos Foster, Jonathan Frost, Jonathan Gould, John Hall, Nehemiah Hunt, Josiah Kidder, Eliphalet Manning, Joseph Phelps, Samuel Bayley, Job Danderly, Timothy Dutton, Jacob Frost, Joseph Gray, John Howard, Paul Hunt, Asa Laveston, Daniel Merritt, Hezekiah Thorndike.

Without undertaking to retell the story of the struggle between British and colonials for possession of the heights in Charlestown, we may notice here a little known circumstance of the period of preparation just before the assault on the breastworks. That Bunker Hill battle was fought behind properly prepared redoubts instead of from the bare hilltop, and that, therefore, the American forces secured the encouragement of success through continuing as long as their powder lasted was due in large measure to the military perspicacy of the leader of the company from East Chelmsford. Of Captain Ford's participation in this affair, Mr. Chase wrote:

On the day before the battle he volunteered to carry from Cambridge to Bunker Hill a message from General Ward. To do this he must pass over Charlestown Neck in the range of the British guns, at the imminent peril of his life. He had orders from General Ward to dismount from his horse at the neck and cross on foot to escape observation. But he ran the risk and passed and repassed on horseback. While at Bunker Hill he warned General Prescott that from movements of the enemy it was evident that they were preparing to attack the Americans on the hill, and urged the necessity of immediately throwing up breastworks and redoubts. Prescott, who had not foreseen such an attack, yielded to the persuasion of Captain Ford and before the morning of the battle the breastworks were completed, without which the Americans could not have held their ground or achieved the immortal glory of that illustrious day.

Early on the day of the assault at Charlestown, it may be added, Captain Ford's company pushed ahead of the rest of their regiment. On arrival the captain was ordered by General Putnam to take charge of the operation of two field guns. John Ford at first objected that his men while good shots with the rifle knew absolutely nothing about the handling of artillery. As the Connecticut general, however, persisted, Captain Ford obeyed like a good soldier, and his amateurartil-

lerists gave a good account of themselves, even though they burst one of the guns at the eleventh shot.

The valor displayed by Captain Peter Coburn, of Dracut, in the fierce fighting that followed is a matter of familiar record. He is said to have been the last man to speak to General Warren before the gallant commander fell. "As the Americans were about to retreat a British officer sprang upon the breastworks and waved his sword encouraging his men. Captain Peter, hurling a huge stone, knocked him backwards, and then followed his men in the retreat." He is said to have come back to Dracut with eleven bullet holes in his clothing and not a wound on his person.

The mortality among the men from the Merrimack was considerable at Bunker Hill. An important loss to the Revolutionary cause, as already indicated, was that of Lieutenant-Colonel Moses Parker, of the Twenty-seventh Regiment, a lineal descendant of one of the five Parker brothers who were among the original settlers of Chelmsford. Colonel Parker was taken wounded by the British to Boston, where he died as a result of the amputation of his leg, on July 4, 1775.

In the retirement from the hill, Captain Ford found among the wounded his neighbor, Captain Benjamin Walker, of the Second Chelmsford Company, whom he carried on his back for some forty rods. As it soon became evident that both men would be captured, Ford dropped his burden at Walker's request and escaped over Charlestown Neck. Captain Walker, like his fellow-townsmen, Colonel Parker, died in prison from the effects of his wounds and, presumably, from lack of care. In the battle, Colonel Bridge's regiment had fifteen killed and twenty-nine wounded.

During the siege of Boston that followed the battle of Bunker Hill, it became evident to the men at Pawtucket Falls as elsewhere that a long war was ahead. Captain Ford and most of his men, after nine months' service, reënlisted. In intervals of quiescence they were permitted to return to their farms for needful operations. They joined in the expedition to Ticonderoga, during which Captain Ford kept an orderly book that is preserved by a descendant.

An old enlistment agreement, discovered by Captain J. P. Thompson, of Lowell, in 1892, indicates the seriousness with which the Chelmsford farmers took their military duties. It contains the names of several residents of the "Neck" and is to the following purport:

We the Subscribers do hereby severally enlist Ourselves into the Service of the United Colonies of America, to serve until the fifth day of April next, if the Service shall require it; and each of us do engage to furnish and carry with us into Service a good effective Firearm and Blanket (also a good Bayonet and Cartridge pouch if possible). And we severally consent to be formed such Persons as the General Council shall appoint with a Company of Ninety Men, including one Cap-

tain, two Lieutenants, one Ensign, four Sergeants, four Corporals, one Drummer and one Fifer, to be elected by the Companies, and when formed we engage to march to Headquarters of the American Army, with the Utmost Expedition, and to be under the Command of such Fieldofficer as the General Council shall appoint, and we further engage during the Time aforesaid to be subjects to such Generals as are, or shall be, appointed, and to be under such Regulations, in every respect, as are provided for the arms aforesaid. Dated this—Day of January 29, A. D. 1776. Samuel Perham, Snr., Jonathan Stevens, Joseph Spaulding, Samuel Twiss, Isiah Keyes, John Mears, William Fletcher, Stephen Peirce, the J. P. Herelujahah Fletcher, Jonas Spaulding, Oliver Richardson, Ebenezer Gould, Isaiah Foster, Jephtha Spaulding, Charles O. Fletcher, John Spaulding, William Pierce.

On the north side of the river, Captain J. B. Varnum's reinstatement as an officer was not long delayed after the retirement from Charlestown. "The legislature thus formed," he writes, referring to the session of 1775-76, "having now organized the militia, they divided the town of Dracutt to two companies, a choice of officers was ordered and the company to which the said Varnum belonged, both train band and alarm list, except seven old men, avowed that they had no dislike to him as an officer except as to his age."

To clinch matters, young Varnum had a personal interview with each of the objectors, and agreed not to accept the tendered commission if any one of them would carry his story of dissatisfaction to the presiding field officers. This "they one and all refused to do, saying they had rather submit to the choice as it stood than to be at that trouble. He then told them that if they would not be at that small trouble he should accept the command, and that he felt fully determined to perform his duty without favor or partiality: that, therefore, notwithstanding their advanced years, they must expect equal with the other members of the company to do their duty or abide by the rigors of the law." With this understanding Joseph Bradley Varnum took command of the company on May 31, 1776, under a commission from the government of the Commonwealth of Massachusetts, signed by sixteen colonial councillors. This rank of captain he held continuously during the war and until April 4, 1787, when there began a series of promotions that made him successively lieutenant-colonel, colonel, brigadier-general and major-general. In his later life he was considered the foremost authority on military matters in Congress.

Rounding up "Slackers"—The difficulty with which the American Revolution was prosecuted, after the first elation of success had passed, is reflected in the records of the towns out of which Lowell has been formed. The war which our ancestors, with help from several countries of continental Europe, finally brought to a victorious conclusion was nowhere, except in Massachusetts and Virginia, any-

thing like a spontaneous uprising of the people. As President John Adams afterward wrote: "New York and Pennsylvania were so nearly divided, if their propensity was not against us, that if New England on one side and Virginia on the other had not kept them in awe, they would have joined the British." "The great mass of laborers, artisans and small farmers," says James Oneal, speaking of the attitude of the colonies as a whole, "were indifferent to the agitation for liberty and independence." Even in the Bay State, which furnished a quota of soldiers quite out of proportion to its population, strenuous measures had to be taken to bring out the "slackers," and to repress the tories. Striking evidences of the efforts made in this direction in Dracut are to be noted in the town records.

Thus, on February 17, 1777, Major William Hildreth, as town clerk of Dracut, signed a call for a meeting "To see if the town will come into some method such as they shall think most proper for the raising of men in Dracut; for recruiting the continental army from time to time as shall be occasion; and to come into some method for adjusting past service that persons have done in said town in defence of the country." At a subsequent meeting it was voted to give each enlisted man £30 exclusive of Continental and State bounties. Later, in February, 1778, it was agreed to "give as donation to each continental soldier that went into the continental army for the Town for three years or during the war, one pair shoes, ditto stockings, and two shirts." On May 2 following there came another call for a town meeting "to engage men to reinforce the continental army and adjudge what each man shall be allowed for services in the present war; also to raise men to go into the army." In August more efforts were made to induce soldiers to enlist in General Sullivan's army then operating in Rhode Island, and on September 1, 1778, it was recorded that a town meeting "raised £1535, 10 s. to pay nine months, eight mos., six mos. and six weeks men that went into the service the summer past." At this meeting the town officers were empowered to "act as committeemen to raise the men in this town at as cheap a wage as they can get them."

A census, presumably for military purposes, was held in Dracut, and reported by John Varnum in 1778, to the effect that "there was 225, 3 of which were of ye Boston Donationers, one of Charlestown, one Idiot, one distraught man that had been so for a number of years and who had lost the use of his limbs & altogether incapable of helping himself for sundry years past & without hopes of recovering & 4 Negroes."

For the slackness in enlisting there was possibly a certain excuse in the latter part of 1776 and the first nine months of 1777, in that no considerable military operations were in progress in the vicinity, and

that much neglected field-work demanded the services of as many men as possible. Farm help was scarce and high during the Revolution, though by comparison with the prices which the truck farmer of to-day in Pawtucketville or South Lowell must pay it would seem that Squire Varnum got off easy in April, 1778, when he made the following contract: "Settled a bargain with Wm Young for 6 months labor, beginning this day, for which I am to give him a wool, home made coat, waistcoat & breeches, two shirts, 2 pare of Trowsers, 2 pare of stockings, a pare of shoes, a hat & 10 \$ for which sd Wm promised to labor for me for 6 mos from this day."

When there was exceptional need of soldiers, as in the campaign to entrap General Burgoyne in the autumn of 1777, the hardy men on either side of Pawtucket Falls did not fail to respond. The call for troops to assail the British in New York State came from the Great and General Court on September 22, 1777. The towns about the Great Bunt replied promptly.

The ever-reliable Captain Ford shut down his mill and prepared his company to set forth toward the northern army on September 30, 1777. The muster roll of his command in Colonel Jonathan Reed's regiment shows the following names:

Captain, John Ford; lieutenant, Temple Kendall; sergeants, Jonathan Bancroft, Willard Parker; corporals, Silas Pierce, Caleb Coburn, Simeon Cummings; privates, Olive Barron, Jonathan Shed, William Chambers, Jonathan Woodard, Willard Howard, David Putnam, Joseph Adams, Samuel Adams, Jeduthan Warren, Samuel Perham, Josiah Fletcher, Henry Fletcher, Joel Spalding, David Danforth, David Marshall, Aaron Chamberlain, Azariah Spalding, Timothy Adams, Jonathan Robins, Ephraim Robins, Supply Reed, William Spalding, Stephen Pierce, Benjamin Butterfield, Levi Fletcher, Benjamin Haywood, Oliver Richardson, John Hadlock, Joseph Butterfield, Joseph Ingalls, Aaron Small, William Fletcher, Benjamin Detion, Samuel Lunn, Solomon Pollard, John Marsh, Jesse Butterfield, Elizer Farwell, William Parker, Jacob Baldwin, Joseph Tyler, John French, Oliver Adams, Samuel Adams.

This company was out for forty-three days. It brought back some fifty prisoners, which it guarded all the way to Cambridge.

With the Saratoga incident, Captain Ford's military career came to an end. For forty-five years subsequently he dwelt in peace and prosperity at the Falls, remembered by his physician, Dr. John A. Green, as "a tall, wiry, active man, bowed by the weight of years and his great privations and labors, of few words, direct, of primitive simplicity and sterling integrity."

From the Dracut side went forth against Burgoyne, Captain Joseph Bradley Varnum's company with the following muster roll:

Captain, J. B. Varnum; lieutenant, Ephraim Coburn; sergeants, Abijah Fox, Jonas Varnum, Jonathan Jones, Timothy Parker; corporals, John Hancock, David Trull; clerk, Joshua Pillsbury; fifer, Barzala Lue (Barzillai Lew); privates, David Jones, Samuel Barron, William Abbott, Simeon Coburn, David Coburn, Samuel Coburn, Reuben Coburn, Jonathan Crosby, Moses Davis, David Fox, Zachariah Goodhue, Bradley Varnum, Josiah Hildreth, Daniel Jaqueth, John Means, Jonathan Parkhurst, Ebenezer Sawyer, David Sawyer, David McLaughlin, Isaac Parker, Samuel Piper, Jonathan Taylor, Thomas Taylor, Solomon Woods, John Woods, Peter Hazleton.

The veteran John Varnum's entries during the weeks of this campaign are of interesting evidence of the local excitement. They run as follows:

27 Sept. 1777, Orders came for $\frac{1}{2}$ of ye able bodied officers and soldiers immediately to march to Tyconderoga.

29 Sept., Capt. Joseph Bradley Varnum was drawn with 40 men to march to ye Westward.

1 Oct., Capt. Varnum and his men tarried until afternoon waiting for horses.

1 Oct., The Company marched early in ye morning.

12 Oct., Had news that our people had arrived safely to Bennington.

16 Oct., Old Mr. Davis came home from the Army with ye horse that went with the last recruits. Brought word that our friends was all well, in high spirits, that Burgoyne's Army was retreating, our Army harassing them giving battle. Got many advantages greatly embarrassing Burgoyne's Retreat.

Sunday, 26 Oct. 1777. Lt. Ephrm: Coburn, Jona: Jones & Dr. Abbot come home from ye Army. Confirmed the surprising account of ye Wonderful Victory over Burgoyne and his whole Army, being about 7000 all taken, Surrendered to Gen. Gates and laid down their arms to us, resigned their public stores, that our Militia was conducting them to Boston, expecting they would be in this week. Mr. Davis preached an excellent sermon suitable to the occasion, from that part of the story of Moses where Pharaoh & his host was pursuing the Children of Israel, and had overthrew them in the Red Sea.

A concise statement of the Dracut participation in the Burgoyne campaign occurs in the Joseph Bradley Varnum autobiography: "In 1777 he [Captain Varnum] marched with a volunteer company to the siege of Burgoyne, and on the 17th of October, 1777, he had the consolation of seeing a whole British army, with Burgoyne at their head, march from the heights, music beating a retreat, upon the plains of Saratoga, and there lay down their arms and surrender themselves prisoners of war to the American army and militia." General Varnum appends some figures of the number of prisoners and the quantity of the booty. He adds that "Varnum and his command again volunteered their services and guarded the German troops from Saratoga to Winter Hill, near Boston."

The pleasure with which the neighborhood regarded the success of their men at Saratoga is certainly reflected in an entry of Squire Varnum's journal: "1 Nov., Jona: Parkhurst came home from ye Army, brings word that all is well. Zealous for a fife & fiddle for the grand apperance the day that Burgoyne's Famous Army is to be brought in. A Wonderful Show, a day that our hearts should be employed to speak and live to the peace of God."

In the dreary time between Burgoyne's surrender and the American victory at Yorktown, the difficulty of securing volunteers was persistent. Captain Joseph Bradley Varnum, however, in 1778, marched in command of his militia company to Rhode Island to join with General Sullivan in his contemplated attack which was to be made in conjunction with the French fleet. "The fleet being dispersed by a heavy gale of wind it became necessary for the General to retreat. They retreated by way of Providence and served out their term of enlistment at East Greenage and Warwick." Toward the end of the war, nevertheless, the prevalent lack of enthusiasm appears to have affected even the unusually loyal militiamen of Dracut, for Captain Varnum, though in a commendatory way, comes into a record of bewailment that fills General Heath's communication of April 7, 1780, to the General Assembly of Massachusetts, as disclosed in the Heath papers, published by the Massachusetts Historical Society. The Bay State commander reported that "letters [from West Point] are so replete with representations of the uneasiness and discontent of the troops of your line that it would be criminal in me to conceal them." One correspondent, quoted by Heath, wrote: "Where is the publick spirit of the year 1775, where are those flaming patriots who were ready to sacrifice their lives, their fortunes, their all for the publick, are they throwing their weight into the scale against those who have fought bled and even the widows of those who have been killed in the service of their country?" Another correspondent wrote to the general: "Captains Varnum and Bancroft have resigned within these three days, with a great number of other good officers. I have not heard of one soldier inlisting for a month past." Other similar passages might be cited to show that the affair at Yorktown came none too soon to satisfy a war-worn and exhausted people.

Another bit of evidence of the effort with which enlistments were secured is noted in a resolve of the Dracut meeting of February 9, 1779:

To pay Kindall Parker Ten Pound money per money he paid to hire men into the service in the year 1778 18/ for a pair of stockings.

Kendall Parker, who thus appears in the record as a recruiter, advancing his own money in the patriotic cause, was a resident of the

extreme eastern part of the town, an ancestor of Dr. Moses Greeley Parker, of Lowell, some time president-general of the National Society of the Sons of the American Revolution. His military record, as published by the Commonwealth of Massachusetts:

Private, Capt. Stephen Russell's Co. of Militia in Col. Green's Regt. which marched on the alarm of April 19, 1775; services, two days; also Corporal, Capt. Joshua Reed's Co. Col. Varnum's Regt.; enlisted Dec. 13, 1775 (service not given); also Private, Capt. Joseph Bradley Varnum's Co., Col. Simeon Spaulding Regt.; abstract of equipments for train band and alarm list endorsed '1777'; reported as belonging to alarm list; also, returns, etc., of 2nd Dracut Co.; list of persons who paid money to hire men to serve 8 months in the Continental Army, agreeable to resolves passed in April, 1778; said Parker with others hired Ebenezer Sawyer, and is reported as having paid £10 toward his hire.

These efforts on the part of public-spirited men and women, it should be said, gave Dracut a remarkable reputation for participation in the war. In 1904 there was dedicated at Dracut Centre, in front of the Yellow Meeting House, a tablet with the following inscription:

In Memory of the Men of
Dracut
Who Served in the Revolutionary War,
1775-1783,
423 out of a Population of 1173
Placed by Old Middlesex Chapter,
Sons of the American Revolution.
1904

Suppression of loyalists or "tories" was one of the duties or privileges of home-staying folk in the country towns of Massachusetts during the Revolution. Loyal as the Bay State was in the main to the revolutionists' cause, adherents of the King were so numerous and so well to do that the Legislature felt itself obliged on April 30, 1779, to pass its very drastic Confiscation and Banishment Act. Lancaster and other towns of the Nashua river valley were especial centres of Tory influence, as shown by Jonathan Smith, in his "Toryism in Worcester County," and many families of Dunstable, Westford and Chelmsford are indicated by entries in Squire John Varnum's journal as infected by the same spirit of disaffection.

Early Anti-Slavery Spirit—Incidents of the daily life of the neighborhood show that during the Revolution what may be called distinctively American ideas regarding human rights and freedom were becoming part of the mental equipment of average citizens. In view, indeed, of the part which Lowell was later to play in the great war for extinction of feudal slavery in the South, especial interest attaches to

the hostility toward slave-holding which was already developing in New England. The extinction of negro slavery, which in Massachusetts had been forecast in such opinions on the subject as were held by the Varnums of Dracut, was an immediate consequence of the Revolution. The popular notion is that the holding of slaves became illegal through the adoption of the State Constitution, "which declared all men free and equal." As, however, the late Emory Washburn showed in one of his contributions to the Massachusetts Historical Society, this famous clause "was literally a declaration of what the people regarded as already their rights, rather than an exposition of any newly adopted abstract principles. * * * It was not, as already stated, determined so much by any positive language to enactment in the Constitution as by that all pervading sense of the community, that the time had come when that slavery against which they had been so long struggling, was incompatible with their character as a free and independent State, and ought to be suppressed." A datum indicating the revised feeling toward slavery is in an item of the John Varnum journal of March 4, 1779: "One Stephen Hartwell here to advise relating to a Neagro named Jeffery Hartwell. Spent considerable time with him, at his request relating to said Negros freedom. He would have given me a fee. I refused to take one in a Neagro caus."

The Rescue of Silas Royal—Of all the stories of the Dracut interest in the welfare of colored folk, the most thrilling, assuredly, is that of the rescue of Silas Royal, faithful servant of the East Dracut Varnums, from kidnappers, after a chase that brought forth the Varnum clan from Woodbine cemetery down to the Methuen line. This faithful negro was bought as a baby by Major Samuel Varnum in Boston in exchange for a fine salmon. The little pickaninny was carefully reared in the home which the father of two Revolutionary officers had built in the easterly part of Dracut about three miles below the junction of the two rivers.

Royal seems to have grown up into a husky young fellow, popular in the whole countryside. An adventurous spirit led him in the first days of the war to leave home and enlist on a privateer. Out of disputes concerning his share of prize money grew a mass of troubles which the eloquent chronicler, Squire Varnum, describes in one of the most entertaining passages of his journal. Here is the story:

June 19, 1778. This morning while at breakfast heard that Joshua Wyman [of Woburn] had sold Ryal Varnum, that ye news was brought from Westford by Joseph Varnum, Jr., and that sd Ryal was carried off in a covered waggon Handicuffed. On hearing of which Immediately called for my horse & galloped to Jos. Varnums to know the certainty. He confirmed it. Sent him to Capt. Jos. to come Immediately & Joyne in ye pursuit to Relive sd Ryal. He came Immediately. Sent Jonas with my horse. Gave Jonas \$20 to bare his ex-

penses, with orders to pursue with all possible speed, overtake, Bring back, and not suffer such astounding vyolence to Escape with Impunity. They pursued. Came to Woburn, found the news confirmed. That it was ye infamous John White, the Scurrilous Tinker of Haverhill, that Bought him (at ye same time knowing sd Ryal was a free-man) sd White had Imprisoned him, Woburn people had liberated him. Sd White laid a false charge against him. Said he was an Inlisted Soldier in ye Continental service, that he had received \$20 Continental money & had Deserted, that he stole from sundry persons & was a thief, & that if ye prison Could not hold him, ye guard should & Profainly Swore that he had bought him & would have him some-way, and on that complaint, altho he knew it to be false, he put him under Guard. There is ye Infamous White, That hath worked by some means or other to be a Quartermaster for the Army at or near Boston, a fine post to get money when Truth nor Honour be not regarded.

Silas Royal's friends fortunately had influence as well as the grafting quartermaster. The sequel was recorded a day later:

June 26, Capt. Jos. & Jonas Varnum went to Boston. Complained to Gen. Heath Against sd White, had sd Ryal liberated & a promise from ye General that he would take Notice of said White. They give him sd White's Just Character, he promised he would take notice of it. They went to White, Informed him what they had done. He was extremely angry, Curst & Swore very Profainly, they dealt him very sharply for his Conduct to Ryal. He said he did not know Ryal was free. They told him that he could not know that his Crime alleged against Ryal for which he was put in Gaol was true, but that he knew ye Contrary. He said all such Damd Neagrees ought to be slaves. They told him that Ryal was as Good a man, & of as much honour as he, at which he was extremely angry & profain. Laid his hand on his Hanger by his side. They told him that they had seen Hangers & men before they had seen him or his, that they was ready to answer him any way he pleased, that they could not forget his Conduct towards Ryal, that they on sd Ryal's Behalfe should bring an action of Damage for false Imprisonment, that such arbitrary Tyrants & menstealers should not go unpunished. They came to Wyman's ye same Day, Gave him ye like trimming.

The attempted kidnapping of Royal finally came to court, and before Justice John Varnum, the diarist, Captain Joseph Bradley and Jonas Varnum gave sworn testimony to the effect that "some time in June, 1778, we heard from Persons of Veracity that Sergeant Wyman of Woburn had sold Silas Ryal, and that the sd Silas Royal was seen in a wagon with irons on his hands between Cambridge and Waltham, the sd Royal crying for help, as was supposed; But the wagon being drove fast, were not able to make any pursuit. Upon this intelligence we set out in order to rescue the sd Royal, if possible, from being sent forth as a slave, supposing this to be the Intent of the Purchaser."

In the courts the cause of Silas Royal did not at first run just as the Varnums wanted ; but finally matters were adjusted and the delighted black man was restored to his old friends. He lived on as a servant in the Varnum household until after the General's death in 1821, and when he passed away he was buried, at his own request in a corner of the Varnum cemetery beside a grave that was reputed to be that of an Indian.



CHAPTER VI.

Beginnings of Industrial Lowell.

The transition of industry from a basis of handicrafts to one of manufacturing, of social life and customs, from a rural status to one of increasing urbanity and cosmopolitanism, began, as for the Lowell district of Northeastern Massachusetts, in the period that extended from the end of the Revolutionary War to 1822. Events in these forty years did not, indeed, move so rapidly as might have theoretically been expected toward an industrialism which was already established in England and which was more or less generally foreseen as impending in the United States. One is struck in going over local records of the first decades of the new Republic with the persistence of habits of working and living which were fixed long before the separation from England. Politically, of course, man's ways of thinking underwent a change, but otherwise people were inclined to cling to ancient usages and devices for feeding and clothing the family. In the third decade of the nineteenth century, new ideas, new people, came crowding to the villages and farms about the falls of the two rivers. Up to that time East Chelmsford and the communities over the river were only a little more urban than they had been for nearly a century before the Peace of Utrecht.

Building of canals, nevertheless, development of water powers and starting of manufacturing enterprises more ambitious than the very simple woolen mills, saw mills and grist mills of the eighteenth century were signs of an era that was approaching. The cutting of the Pawtucket canal helped to draw public attention to the power that ran to waste over Pawtucket Falls. The inauguration of the Locks and Canals Company furnished for the first time a definite incentive to improve the river for purposes of manufacturing and navigation. The building of the Middlesex canal brought the district into closer connection than before with Boston, and its suburbs, whence, ultimately, came much of the capital and other help required for creating the first American factory city.

The stable, civilized and generally prosperous condition of the communities in question (except that they shared the universal distress which immediately followed the Revolution, and which to a less extent was felt before and during the War of 1812) may reasonably be emphasized.

A tradition to the effect that the neighborhood of Pawtucket Falls, prior to the coming of capitalists from the coast, was one inhabited solely by uncouth rustics is persistent. A characteristic mis-

statement of facts, which should be easily ascertainable, is one in John Bach McMaster's "History of the American People" (vol. 1, p. 61): "When, in 1820, the fourth census was taken the country around Lowell was a wilderness where sportsmen shot game. The splendid falls which furnish power to innumerable looms were all unused, and the two hundred needy beings who composed the whole population of the town found their sole support in the sturgeon and alewives taken from the waters of the Concord and Merrimack." Actually, as has been seen, the Dracut communities, which are now wards of the city of Lowell, belonged to one of the most prosperous and vigorous towns of the Commonwealth, one with a life of its own that would compare favorably with any American community of to-day whose interests are mainly agricultural. The Neck, or East Chelmsford, by reason of its distance from Chelmsford Centre, was less of a communal entity than was the present Pawtucketville, but its people were of the same enterprising and successful sort. Inferior persons and families there were, as everywhere, city or country; but the record of wills probated and the domestic furnishings which are still preserved by descendants entirely refute such a notion of universal poverty as might be gained from Professor McMaster's characterization. The fisheries to which Mr. McMaster refers were of some importance, but any population which should have depended upon them for sole support would have been needy, indeed.

That which was about to happen was, to some extent, foreseen in the district. One certainly of those who had prescience of the forthcoming industrial development was Squire Varnum, whose opinions and deeds have been freely quoted in the preceding chapter, and with whom leave must now be taken. In his will, executed shortly after his death in 1783, is found this clause: "Whereas I have in this Will, Given all my Rights of Fishing, wharfing, staging, Building of Mills, Dams &c. at ye Petucket Falls, and near the same, to my said three sons in Equal proportions, and as the same may hereafter be of some Importance for Mills, I direct that if either of them or their Heirs or any of them shall desire to build thereon, and the others Interested shall Neglect to Joyne therein, those that are Desirous may build thereon without Let or hindrance from their Decling Brethren."

Whatever premonitions of future commercial and industrial activity men like John Varnum may have had, nothing revolutionary took place at once in the life of the settlements about the falls.

Much of the personal attitude and feeling of this time is reflected in reminiscences of the Hildreths, whose chief holdings, as has been seen, were on the Dracut side of the river below the mouth of Beaver brook, occupying a large part of Centralville north of Bridge street.

Lieutenant Israel Hildreth—Preëminent in many respects among the pre-Lowell Hildreths was Lieutenant Israel Hildreth (1755-1839), whom General Reade has most graphically characterized. Assessor, appraiser, agent to Boston, banker, bondsman, meeting house builder, fish ward, fence viewer, keeper of the town paupers and boarder of school dames, overseer of the poor and ordination committee man, road commissioner, referee in disputes concerning bounds and fences, sealer of weights and measures, school committeeman, selectman, land surveyor, town treasurer, town clerk and tithingman—these are some of the local offices which he is shown by the town records to have held. He had besides, a taste of military experience and his service aboard a privateer in the Revolution was not without episodes. He lived in a part of Dracut that was afterward annexed to Lowell and during his long life time he saw the little villages about the falls in process of being overlaid with a thriving city. Much of a conservative he appears to have been, least as regards changes in the life of the neighborhood which the advent of capitalists from Boston was effecting. He led the resistance of Dracut to encroachments upon ancient fishing privileges and he otherwise was an opponent of the policies of the Locks and Canals Company.


General Reade's account of Israel Hildreth indicates that he was one of those exceptionally strong and complex characters who found conditions favorable in the first days of the Republic. He must have created an impression of awe among his intimates, for even the members of his family habitually addressed him as "sir," and when he entered a room all chattering or merriment ceased. His goodness of heart at the same time was universally recognized, and all beggars or other persons in need of help were sent to Lieutenant Hildreth. Often several beds in the back part of the Hildreth mansion were occupied by homeless wanderers whom no one else would have sheltered. His means were large for the time, and he was known as a liberal subscriber to many good causes. In person the Lieutenant was stately and dignified, scrupulously neat in his attire and, unlike most men of his period, never addicted to tobacco. He had black hair which he wore braided into a cue and tied behind with a black ribbon. He attended church at Dracut Centre. If on any account the sermon did not please him he was liable to leave abruptly, banging the door as he went out. In politics he spurned dictation, especially that of his down-river neighbor, General Joseph Bradley Varnum, who once tactlessly said to him while both were serving in the Legislature: "Israel, of course you will vote as I do."

Lowell's First Titled Resident—Intimate glimpses of the quality of the social life of the neighborhood directly after the Revolution are similarly afforded by the story, which Mrs. Griffin has most graphically

told, of a distinguished alien who came to spend the remaining years of his life in the older part of Dracut. Colonel Marie Louis Amand Ansart de Marasquelles, son of a French marquis and nephew of the celebrated Marquis Montalambert, or Colonel Ansart, as he was democratically known after he became a resident of this country, was one of the conspicuous residents of the Merrimack valley for a number of years. He had come from France to help the revolutionists in 1776. Because of his special knowledge of artillery, he was made colonel of artillery and inspector-general of the foundries of Massachusetts, an office which he held throughout the Revolutionary War. Not caring to return to France he was naturalized in the courts of Massachusetts. He chose a home in Dracut through his friendship, as it is supposed, with General James M. Varnum. He bought the farm on Varnum avenue known as "The Ministree," which had been occupied by Rev. Thomas Parker and there he lived down to his death in 1804. As a resident of the community at Pawtucket Falls, Colonel Ansart took a live interest in local happenings, and his name appears frequently in the records. He kept servants, both white and black, including a French cook. His sulky, to which a fine span of horses was hitched, is said by Mrs. Griffin to have been the first vehicle of its kind in Dracut. There seems to be reason for believing that Colonel Ansart spent more than his income. After his death, at all events, Mrs. Ansart, in 1804, petitioned Congress for a pension, setting forth her late husband's services and the straitened circumstances in which he left his family. This petition was referred to a committee, but no action was taken until March 17, 1806, when the widow was given leave to withdraw. After Mrs. Ansart's death in January, 1849, a pension was granted the children.

Colonel Ansart's long-lived sons, it may be added, are well remembered by people of Lowell and Dracut who in 1918 are not beyond middle age. Their residence in the homestead on Varnum avenue in the seventies and eighties gave to many a sense of nearness to the revolutionary struggle. Concerning the later survivor of these "Sons of the American Revolution," the "Evening Star" published an obituary on November 18, 1892, which contains interesting and valuable data as follows:

Abel Ansart, an old citizen of Lowell, died of pneumonia recently at the residence of his son, George Ansart, at Londonderry, N. H., with whom he had resided for a number of years past, at the advanced age of 94 years, 1 month and nine days. Mr. Ansart was born in Dracut on what is now called Varnum Avenue, and was a son of Louis Ansart, an officer in the Revolutionary war, who came from France in 1776, and was employed by our government in casting cannon, and appointed inspector general of the foundries. Col. Ansart was an educated Frenchman. Some time after the death of Col.



Ansart Abel, the third son, went to live with Daniel Webster, with whom he lived for many years. He became a great favorite with Mr. Webster, and the writer has frequently heard him relate incidents in connection with his experiences in the Webster family. After he had returned to Dracut to live the great statesman would sometimes send for him to go on hunting and fishing excursions with him. Two of the sons of Col. Ansart remained in Dracut, viz. Atis, who died April 18, 1888, at the age of 91 years, and Abel, the subject of this sketch. They became residents of Lowell by the annexation of the territory where they lived in 1874.

Belated recognition of the importance of this first titled resident of Lowell came about in recent years. For a long time a simple headstone in the Woodbine cemetery occasionally caught the eye of the curious. Mrs. Griffin's account of Colonel Ansart's career, in her book on old Lowell houses, brought to light many forgotten details. The Dracut Library, since February 22, 1906, has had a portrait of him, believed to be authentic. This work was given at a meeting of the historical committee of the Molly Varnum Chapter, Daughters of the American Revolution, of Lowell, Silas R. Coburn receiving the picture and making a response in behalf of the library trustees. Under the portrait is an inscription: "Marie Louis Ansart de Marasquelles, colonel of artillery, inspector general of Massachusetts foundries in the War of the American Revolution; naturalized in 1793 by the name of Louis Ansart; born in France in 1742, died in Dracut in 1804."

The Crushing of Shays' Rebellion—The political and military history of the Lowell district in the last years of the eighteenth century and the first decades of the nineteenth is hardly to be told, connectedly.

Since Shays' rebellion of 1786-87 in Western Massachusetts was directly responsible for a concerted movement toward a more stable National government and a National constitution, the participation of Dracut and Chelmsford men in it has some special interest. After the Revolution, as is well known, the economic conditions of most American communities were deplorable in the extreme. The poorer classes of society, in particular, were hard pressed. Money was scarce. Farmers and others were very generally reduced to the expedient of barter. Thousands signed pledges to resist any court that attempted to take their property and to resist the public sale of goods that had been taken to pay debts. Those circumstances led to the revolt of many representatives of the debtor class under Daniel Shays, a former soldier of the Revolution.

Without entering into discussion of the real story of Shays' rebellion, which others who follow the economic interpretation of history have told convincingly, it should be chronicled that one of the leaders in suppressing the revolt was attended by a following of Var-

nums, Coburns, Parkers, Pierces, Hildreths, Tylers and representatives of other families of the farms about the falls. The foremost military and political figure of northern Middlesex county, Joseph Bradley Varnum, of Dracut, in the winter of 1786-87, left the Senate chamber and marched with his company to aid General Benjamin Lincoln in quelling the rebellion. While the campaign was short and bloodless the service was severe on account of the bitter weather. The Varnum autobiography contains a succinct account of the night march of thirty-three miles to Petersham through the crunching snow without a mouthful of food, an exploit which virtually spoiled Shays' chances of success. In the midst of the excitement General Lincoln found himself in need of funds with which to pay the troops. He sent Captain Varnum to Boston. The efficient officer covered a journey of three hundred and twenty miles in three days and one-half, and thereby won a special letter of approval from the commander.

The intense feeling against the lower orders of society that was aroused throughout Massachusetts by Shays' rebellion was notably strong in the territory from which Joseph Bradley Varnum was thus summoned to render effective aid. Being then State Senator, General William Hildreth wrote out an oath of allegiance under date of March 4, 1787, which was signed by many of the neighbors. "The signers," writes General Reade, "were sworn before a justice of the peace and their affirmation of principle and patriotism deserves to be honored by all Americans." The wording of this oath, which is quite representative of the literary style of the late eighteenth century in North America, is as follows:

We, the subscribers, do truly and sincerely acknowledge, profess, testify and declare that the commonwealth of Massachusetts is and of right ought to be, a free, sovereign and independent state; and I do swear that I will bear true faith and allegiance to the said commonwealth and that I will defend the same against traitorous conspiracies and all hostile attempts whatsoever, and that I do renounce and abjure all allegiance, subjection and obedience to the King, Queen or government of Great Britain (as the case may be), and every other foreign power whatsoever; and that no foreign Prince, Prelate, State or Potentate hath, or ought to have, any jurisdiction, supremacy, prominence, authority, dispensing or other power which is or may be vested by their constituents in the Congress of the United States.

And I do further testify and declare that no man, or body of men, hath or can have any right to absolve or discharge me from the obligation of this oath, declaration or affirmation, and that I do make this acknowledgment, declaration, denial, renunciation and abjuration heartily and truly according to the common meaning and acceptation of the foregoing words without any equivocation, mental evasion or secret reservation whatsoever. So help me God.

The first signers of this oath of allegiance were J. B. Varnum, William Hildreth, Thomas Hovey, Israel Hildreth, Parker Varnum, Joseph Varnum, Bradley Varnum, Joseph Varnum, James Varnum, Peter Parker, Stephen Russell, Josiah Hildreth, George Stevens, Thomas Coburn, James Harvey, Richard Hall and Samuel Barron.

Another local incident which illustrates the feelings started by the Shays' disturbances concerns the ever loyal Molly Varnum. "During this winter's campaign," writes General Varnum, in his autobiography, "Mrs. Varnum was annoyed by a number of those friendly to the insurrection and insulted in a most menaced manner, but that heroic zeal and undeviating patriotism which was her uniform characteristic during the Revolutionary War enabled her promptly to repel their insinuations and menaces in a manner which compelled them to retire with apparent shame and confusion of face."

An order on the town of Dracut dated in January, 1787, gives an indication of the method of financing the campaign against Shays. It is in the following phraseology:

To Mr. Joseph Varnum, Treasurer of the Town of Dracut or Successor in sd. office pay to us the subscribers Selectmen of Dracut four pounds sixteen shillings which said sum the Selectmen paid to the Soldiers of Dracut when they marchd. towards Worcester for the Defence of this Commonwealth also twelve shillings to deliver to Mr. Kindel Parker Junr. for expenses for man and horses carrying Provisions to the Army.

THOMAS HOVEY,
ISRAEL HILDRETH,
Selectmen of Dracut.

Dracut Jan. ye 23, 1787.

A Contested Election—The district of which Chelmsford, Dracut and Tewksbury were a part in 1795 elected to membership in the Fourth National Congress, General Varnum, who was an anti-Federalist. An evidence of the political animosities of the time occurred when this election was promptly challenged by some of the successful candidates' adversaries on the ground that, acting as selectman of Dracut, he had allowed certain votes to be received and counted, although those who cast them were ineligible to vote. A committee of Congress was appointed to look into the legality of Mr. Varnum's election. Their report was to the effect that the "people of Dracut were so satisfied as to give no information on the subject; and that the universal respect for Mr. Varnum where he lived contradicted the old proverb that 'a prophet is not without honor save in his own country'." The report was a complete vindication, since "no one of the plaintiffs or their agents had appeared to prosecute the complaint; that the sitting member had evidence that the election in the town of Dracut (the unfairness of which had been complained of) was conducted with justice and propriety, and though there had been some

irregularities committed in other places, they mostly owing to the misconduct of the petitioners, and that the conduct of the sitting member has been fair and honorable throughout the whole transaction." The Congressional district, of which Lowell was soon to be the chief city centre of population, took pride in the rapid rise of this son of Dracut to a commanding place in the Nation and he never lacked local support in the elections which returned him to several subsequent Congresses.

The fervor and rancor of American politics in the first four or five administrations has impressed more than one student of our history, and the corner of Massachusetts under survey was typically American in this as in other regards.

Politically as well as in social aspects there appears to have been considerable difference between Chelmsford and Dracut in the first years of the Republic. The community south of the Merrimack was inclined toward Federalism; in the precincts beyond Pawtucket Falls the personal influence of the Varnums was perhaps not the only factor in keeping the electorate strongly democratic.

A characteristic election was that of 1809, when the anti-Federalists in opposition to Christopher Gore nominated for the Governorship, Levi Lincoln for Lieutenant-Governor, Joseph Bradley Varnum. The Federalists, as was expected, carried the State. The votes of the two towns in question was:

	Gore.	Lincoln.
Chelmsford	95	109
Dracut	23	171

In the midst of the high feeling created by the opposition of Massachusetts Federalists to the second war with Great Britain the Republicans on a platform favoring vigorous prosecution of the war nominated General Varnum for Governor and William King for Lieutenant-Governor. The intrenched candidate for reëlection was Caleb Strong. The campaign was an active one in which the State rang with such doggerel as "A Republican Song" with a Varnum and King chorus of which the first and last stanzas are possibly enough to quote:

Election approaches! ye Freemen attend
And take the advice of a plain-hearted friend.
If you're faithful in duty I'll venture to sing
You are sure of the triumph of Varnum and King.

* * * * *
Then be active and firm, ye Republican souls,
And let nothing keep you away from the polls,
For Honor and Truth and Liberty sing
Huzza for America, Varnum and King.

Despite the personal respect in which the candidate from Dracut was held, he failed to be elected, and Massachusetts was left in the

position of the leading defeatist Commonwealth. The vote of April 5, 1813, in the towns of the Lowell district was as follows:

	Varnum.	Strong.
Dracut	148	61
Chelmsford	93	151
Tewksbury	100	57

War of 1812—Defective as the records of the War of 1812 are, it is evident that the militia of Chelmsford, Dracut and Tewksbury stood ready for service just as the minute-men of 1775 had been prepared.

When general orders were issued to the State Guard on July 3, 1812, two of the three commanding officers of the Southern Division were Dracut men, the orders being received by Major-General Joseph B. Varnum and Brigadier-Generals Ebenezer Lothrop and William Hildreth.

The hostility of Boston and the other coast towns to the war was such that the early preparations for possible invasion appear to have been much of a farce. Governor Strong mounted a few cannon on Boston Common in a position of so evident uselessness that they were made the subject of sarcastic jest by his political opponents. It was not until after the capture of Washington in the summer of 1814 that the Commonwealth became aroused to the need of equipment against possible and probable assault. On September 6, of that year came orders from Adjutant-General J. Brooks for "the whole of the militia to hold themselves in readiness to march at a moment's notice." Pursuant to the spirit of these orders a convention of citizens of Middlesex county met at Concord with Hon. Amos Bond as chairman. Dracut was represented in the committee on resolutions by Brigadier-General Simon Coburn, General Varnum's son-in-law, whose associates were the Hon. William Eustis, Hon. Samuel Dana, Mr. Bond, Dr. Thomas Whitcomb, Colonel Enoch Wiswall and Colonel John Chandler. The resolutions called for immediate preparation of the forces asked for by the Governor, for their proper equipment by the selectmen of their respective towns and other measures of preparation. In the fortification of Fort Strong that followed some of the Middlesex companies were used, but the towns in the Lowell territory seem not to have been represented. The district on the whole can hardly be said to have participated extensively in the second war with England, but that circumstance was due primarily to the attitude of leading families at Boston and other commercial centres of New England. General Varnum, who was a vigorous supporter of Madison's administration and of an aggressive military policy, was President of the United States Senate in 1813-14.

Forty Years of Industrial Expansion—A gradual diversification of the vocational activities of the people about Pawtucket Falls may

be traced during the period of about forty years in which the contests between Federalists and Republicans stood for a genuine opposition of interests between shore towns of New England and the undeveloped hinterland.

✓ "By common consent," writes Weeden in his "Economic and Social History of New England," "the year 1783 has been made an epoch in industrial development." In that year the political independence of the United States was definitely guaranteed; there were not wanting those of the dominant social classes who already foresaw the economic independence of the continent. "By the American war and the political and industrial complications in India," says Thorpe in "A History of the American People," "the British navigation system received a fatal blow. No longer could England locate or monopolize the markets of the world and dictate the terms of trade. * * * With freedom came newness of industrial life. The United States became the one neutral nation of the civilized portion of the globe, and this unique position had a remarkable and favorable effect upon her population. The winning of American independence was the stimulus to the industrial action of the modern world."

The necessity of rapidly acquiring new and more efficient means of wealth production was enforced by the financial condition in which most communities found themselves at the close of the long struggle. "It is not too much to say," writes John Fiske in "The Critical Period of American History," "that the period of five years following the peace of 1783 was the most critical moment in all the history of the American people." "The war, like all wars," states James O Neal, "left the country devastated and impoverished, and the distress was frightful in all the states. In Vermont one-half the community was totally bankrupt; the other half was plunged in the depths of poverty. The year which had elapsed since the affair at Yorktown had not brought all the blessings that had been foretold. A large part of the country had been laid waste; commerce was all but suspended and Great Britain still maintained the policy of commercial antagonism toward her late colonies." To quote again from Thorpe: "Had industrial prosperity been allowed the colonists the Revolutionary War would doubtless have long been delayed. Perhaps it might not have occurred. It was the relentless and irresistible pressure of economic necessity that precipitated the war. Whatever the aspects of the eighteenth century literature, it all signifies that the war began as an industrial struggle, was waged to the end as an industrial struggle, and left behind it grave economic problems, many of which are not yet settled."

That which is most significant in the story of Lowell is that this community presents intensively all the familiar phases of the trans-

formance of an agricultural countryside into a modern industrial centre. Enough occurred between 1783 and 1822 to indicate how inevitable such an evolution would be, whatever the particular form it might take at the falls of the Merrimack.

The sudden upgrowth of interest in transportation and manufacturing which was one of the phenomena of the post-Revolutionary era, and which was soon felt in the communities at East Chelmsford and West Dracut, resulted, in brief, from causes that are quite apparent. Prior to the war the strip of seaboard from Maine to Florida had been regarded by the ruling classes of England as one of their prime opportunities for profitable investment. Restrictions of every conceivable kind had been placed on colonial enterprise. Parliament in 1750 prohibited the colonials from erecting mills or apparatus designed to slit or roll iron, to do plating or to make steel. No hatter might employ more than two apprentices—an obvious plan of preventing the development of hat factories. Hats or woolens made in one colony might not be sold in another colony. Despite the considerable smuggling of locally made articles there was, therefore, relatively small incentive to engage on manufacturing on any large scale.

This oppression from overseas naturally often overreached itself. "The acts restricting commerce and manufacture," says Oneal, "were aimed, as we have seen by the British ruling class against the colonial ruling class. This was sufficient to arouse the resentment of the latter and drive most of them to revolt. But our colonial manufacturers were also aware of the great advantages which their British brethren possessed in the new machinery that Arkwright and others were inventing across the sea. Machines for carding and spinning were fast displacing the old hand processes in making cloth. * * * To guard this advantage the British parliament passed acts prohibiting the exportation of machines, plans or models of machines or any tools used in cotton or linen manufacture, under penalty of 200 pounds. Even the possession of them for export rendered the offender liable to arrest."

Nearly forty years elapsed before the full apparatus of the factory system, as evolved in Great Britain, was available for setting up at Lowell; but in the meantime a work of preparation toward this outcome was visibly going forward.

The Era of Highway Making and Canal Building—Improvement of transportation facilities was one of the subjects that first occupied the attention of enterprising men at the end of the eighteenth century.

In a countryside like that of Eastern Massachusetts, with its large population more evenly spread over the farms, less congested into towns than it now is, the problem of distributing commodities not unnaturally seemed to be of paramount concern. Until, indeed, the

motor car once more gave the open highway a renewed importance, New England roads, and incidentally roadside taverns, were never so busy as in the days just prior to the introduction of steam navigation and the steam railway.

Across the corner of Lowell that lies between North Billerica and Middlesex Village passed in the first years of the nineteenth century an almost continuous procession of huge wains called "baggage wagons." These were part of a regular transportation system covering Central New Hampshire, and the valley of the Upper Connecticut. Each wagon was covered with a canvas top and the goods were securely protected by tarpaulins. In winter the wains were replaced by two horse sleighs. These vehicles brought butter, cheese, apple sauce, dried apples, dressed hogs, maple sugar and other farm products to Boston and returned with salt fish, groceries, dry goods and much Medford rum.

The old tavern, still standing in 1918 in Middlesex Village, was long a favorite hostelry of the drivers in this service. It was only one of almost innumerable places of refreshments between Boston and the outlying settlements of Northern New England. The prices which teamsters paid for entertainment at such houses as this one seem reasonable as judged by modern standards. In 1814, according to J. B. French's recollections, lodging at taverns in Chelmsford cost six or eight cents, the former rate prevailing if two shared a bed. Meals were twelve and a half cents each. "It was not an uncommon occurrence," remarks Mr. French, "when the teamsters were seated around a good fire in the evening, for the landlord to bring in and treat to what cider the company might want; and sometimes when competition ran pretty high for this kind of travel, a glass of 'sling' or 'bitters' was thrown in on settlement in the morning."

Even after the Middlesex canal was built, much of the traffic between East Chelmsford and Boston continued to go over the highways. "Teaming from what is now Lowell and the adjoining towns," wrote Mr. French, in 1874, "was done by ox teams almost entirely, both summer and winter, in going to market, which was either Boston or Salem. Teams usually started from home the forepart of the day, carrying their own provision for man and beast, traveling all day and such part of the night as to enable them to reach market early the next morning, and disposing of their load that forenoon, would start for home in the afternoon, reaching home the third day or night in the afternoon or evening, as a general rule without much rest or sleep except such as they were able to get while their teams were feeding."

How uneconomical this mode of transportation was can readily be understood. It kept a large body of otherwise productive workers on the road. It prevented use of oxen and horses in farm work. It was

liable to interruption in "mud time." The heavy teaming entailed great expenses upon the towns for maintenance and repair of roads.

That favorable conditions for this large volume of teaming were kept up is proof of essential Yankee enterprise and conscientiousness. The office of road surveyor was entrusted to an energetic and careful man. Typical of the scrupulousness with which the highways were maintained are entries in the Dracut records regarding the repairing of what is now the main road between the cities of Lowell and Lawrence, and which then connected the communities at the falls with Methuen and Haverhill. In 1800 Jonathan Parker, serving as "Surveyor of Highways and Townways in the Town of Dracutt," was instructed "To mend and repair" the road beginning at the school house near the Prescott Varnum place as far as the Methuen line, and he was commissioned "to allow one dollar per day for a man working at said way and fifty-six cents for a yoke of oxen at said way until the first day of August and after that fifty cents for a man per day and thirty-three cents per day for a yoke of oxen and twenty-five cents per day for a cart when used." This order was signed by Thomas Hovey, Timothy Barker, Jr., and Solomon Osgood, Jr., assessors of Dracut. Similar entries might doubtless be drawn from the Chelmsford and Tewksbury records.

The Original Pawtucket Bridge—Building and maintenance of bridges likewise assumed much consequence in the decades when trade expansion was primarily effected by extensions of good roads.

The story of the first bridge over the Merrimack at Lowell, at the location now occupied by the sightly Pawtucket Bridge of reinforced concrete, is closely connected with the development of a trade route over Mammoth road to Derry, Londonderry, Chester and other interior towns of Southern New Hampshire. The economic and social effects of this undertaking supplanting the tedious and unreliable Clark's Ferry at Middlesex, and Bradley's Ferry at Centralville, were such that the details may properly be set forth with some amplitude, and the narrative carried down into years succeeding the incorporation of the town of Lowell.

In this building of the predecessor of Pawtucket bridge, Lowell claims a certain priority among the towns of the Merrimack valley. It was the first to span the river in Massachusetts. Twenty-one days before the Essex bridge at Newburyport was opened for traffic, which occurred on November 26, 1792, passage, free of tolls for twenty-four hours, was admitted to the Middlesex Merrimack river bridge, regularly incorporated under the laws of Massachusetts. This was thus a pioneer installation of its kind. Already in preparation for the event, the Mammoth road—its grandiloquent name delightfully expressive

of the spirit of its age—had been laid out through Dracut into the New Hampshire towns to the north.

The Middlesex bridge proprietorship, in the organization of which Parker Varnum, son of Squire John Varnum, was the leading figure, was formed in February, 1792, under the style of the "Middlesex River Bridge Corporation." The plan was duly approved by Governor John Hancock. At a meeting of stockholders held at the house of Joel Spalding in East Chelmsford, now the home of the Molly Varnum Chapter of the Daughters of the American Revolution, Colonel Loammi Baldwin, of Woburn, was elected president, Parker Varnum clerk and Colonel James Varnum treasurer.

The bridge planned at this meeting was entirely of wood. Work was begun on the structure in June, 1792.

To hurry operations forward the president was instructed by the directors to buy at Boston two barrels of New England rum and every laborer was allowed half a pint a day "when called for by the master worker." This purchase may have looked like favoritism toward the workers, for a little later the president was instructed to obtain a barrel of West India rum for use of the proprietors. Jocular intent, it may be, was inherent in a minute to the effect that directors absent from regular meetings must pay "a fine sufficient to pay for two mugs of flip or toddy."

The efforts of the carpenters, thus encouraged by generous potations, seem to have been redoubled, for the work was finished long before cold weather came to make it arduous and disagreeable. On the evening before the opening day a special supper was provided for sixty of the proprietors and laborers. The menu has not been preserved. It is a safe surmise that the viands were not unaccompanied by flip and toddy.

Tolls were collected on the new bridge by Ebenezer Bridge, of honored Chelmsford name. In the first three months the receipts were £18, 14s. 8½d. An immediate effect was greatly to increase the importance of the community at West Dracut, and, as will be shown in the subsequent account of the Pawtucketville church, to bring the residents of the Pawtucket street and Wannalancet Hill district of Lowell into close parochial relations with the church over the river.

The record book, still in existence, of the proprietors of Middlesex Merrimack bridge is one of the invaluable source books for the years between 1792 and the incorporation of the new town of Lowell. Among several interesting circumstances which it reveals is some evidence of a movement in 1813 toward setting off a separate town to include the eastern part of Chelmsford and the western part of Dracut. This incorporation, which would have been more logical than the one actually occurring a few years later, would have corresponded sub-

stantially with the limits of the present city, exclusive of Belvidere and Centralville. It would, however, presumably have taken in a larger section of Dracut than that which was later annexed under the name of Pawtucketville.

The Washingtonian temperance movement is shown by the bridge proprietors' book to have been still far in the future in the first decade of the nineteenth century, for, in keeping with the conditions of the original construction, the management continued to be liberal in their supply of strong liquor for their workmen. The following record is characteristic: "1803. June 22. Being about to rebuild with stone abutments, voted to have the treasurer procure rum by the barrel and sugar by the quantity, and deal it out to the workmen." That this favoring attitude toward products of the still was not coupled with any hostility toward religion, of which the proprietors may be assumed to have been staunch "professors," is indicated by a vote passed a little later offering "free passage to all persons to any public meeting at the West Meeting-house in Dracut." It was, indeed, a deacon of this church, of whom the story is told that being in Boston to lobby for some privilege concerning the bridge, he was met by two of his fellow proprietors in a bar room. "Well, deacon, what shall we have to drink?" "I don't know as it will do for me to take anything," was the cautious reply, "unless perhaps it be a leetle gin for my complaint." The "complaint," of course, was generally believed to be imaginary.

The bridge at the falls continued throughout the pre-Lowell period to offer the only continuous highway to the farming districts north of the river. The desirability of having a second bridge a couple of miles further down river, to relieve inhabitants of eastern Dracut from the tiresome detour around the Great Bunt, seems to have been felt long before Central bridge was successfully projected. The proprietors at Pawtucketville did not welcome competition, as may be observed from this entry: "1823. Jan. 16. At a special meeting voted to choose an agent to oppose in the Legislature the petition of Edward St. Loe Livermore for a bridge over Merrimack River at Hunt's Falls, so-called."

Year by year until long after Lowell was a thriving city, passengers paid toll at Pawtucket bridge, and the proprietors counted on receiving substantial dividends. The business methods under which they operated would excite the ridicule of a modern accountant. "The actual toll money," writes James S. Russell in his paper, "How Pawtucket Bridge Was Built," read before the Old Residents' Association, August 4, 1887, "was emptied upon the table, counted and after deducting the quarter's expense, the remainder was divided by sixty,

the number of shares. Each one present bagged his pile, and others at their leisure obtained their portions by calling upon the treasurer."

As an enterprise the building and operation of the bridge was a good investment. No special provision was made for depreciation and obsolescence. When repairs or rebuilding became necessary the shareholders were liable to assessment, but in only one year, in 1818, was it required that an assessment be paid in cash. Ordinarily a certain percentage of the annual dividend was withheld and called an assessment. The original shares cost \$125. They sold as high as \$300. The dividends, amounting in some years to as high as eighteen dollars a share, averaged to net about twenty-four per cent. on the first investment. The first cost of the bridge was \$8,000. When, finally, after enjoying very substantial returns for more than half a century the proprietors were required to sell out in the interest of progress they received \$12,000 for the physical property.

The early bridging of the Concord at North Billerica has been described. This relatively narrow stream offered no such obstacles to the bridge builder as did the Merrimack. It should be noted that the growth of a settlement on the east side of the Concord in what was later called Belvidere was encouraged by the building of a bridge in 1774 just north of the site of the present structure. This bridge, as James Bayles has shown in one of the Old Residents' contributions read by him in 1891, must have been a flimsy structure, for it was blown down before it was fairly completed and another was started a few rods further up stream on the site of the present bridge.

Newburyport Enterprise at Pawtucket Falls—Lowell, as a city of picturesque canals and humming factories, is generally held to have been a creation of Boston capital. It has sometimes been overlooked by historians that the first effort to canalize the river came not from the Hub, but from the wealthy and aggressive town at the mouth of the stream, from Newburyport.

Shortly after the declaration of peace in 1783 the merchants of Newbury, as disclosed in a paper prepared in 1876 by the artist, T. B. Lawson, of Lowell, began to consider ways and means of increasing traffic with the interior. In winter they had good trade with the towns of Southern and Central New Hampshire, and even with Vermont, by means of sleds laden with "pork and produce." Much of this traffic ceased with the advent of spring. Development of waterways was already much under consideration abroad. The same impulse led Newburyport capitalists to send Nicholas Pike and Captain Stephen Holland up river to make a survey of the possibilities of a canal which should eliminate the navigation difficulties at Pawtucket Falls. Out of this expedition grew the first considerable deflection of the waters of the Merrimack for a commercial purpose.

Arrived at the seat of Captain John Ford's milling operations, the investigators from Newburyport discovered a natural depression extending from the south side of the Merrimack just above the falls to the Concord river at no great distance from its confluence with the larger stream. Out of their report grew a definite project for a canal. A charter for this enterprise was granted June 25, 1792. The directors were: President, Hon. Jonathan Jackson; vice-president, Hon. Dudley Tyng; treasurer, Joseph Cutler; Joseph Tyler, Nicholas Johnson, John O'Brien, Joshua Carter and William Smith.

Plans were informally considered at a dinner in Davenport's tavern on August 13, 1792, and then came a meeting at the house of Joseph Varnum in Dracut, at which the actual route was mapped out. It was resolved "that a canal be cut at Pawtucket Falls on the side of Chelmsford, beginning near the 'Great Landing Place,' thence running to 'Lily Pond,' from there by 'Spear's Brook' to Concord River."

This was on August 23. On the 13th of September following, Mr. Tyng was authorized to buy from Jonas Parkhurst the land through which the canal would run and to pay therefor £100 lawful currency. In March, 1793, the promoters signed a contract with Joseph Tyler to dig the canal for £4,334 lawful, of which £1,000 was to be paid on or before April 25, 1793. Pawtucket Falls were not the only rapids to be considered, for on June 14 following it was resolved to ascertain how much money was needed to clear Hunt's Falls just below the junction of the two rivers and Wickassee Falls at Tyng's Island. Operations at the former spot may have been included in a resolve of July 27, 1795, to the purport "that Colonel James Varnum be authorized to employ men, and to superintend operations below Pawtucket Falls, and to expend all necessary sums not exceeding one thousand two hundred dollars."

Canal building was not without its difficulties, and, on January 25, 1796, Joseph Tyler having failed to complete the work as expected, it was voted that "Thomas Marsh Clark of Newburyport, be, and hereby is, appointed superintendent of the operations to be performed at Pawtucket Falls the ensuing season, and that he be paid three dollars and thirty-three and one-third cents per diem, for every day that he shall be employed in the service of the proprietors, together with his board and necessary travelling expenses. He is also authorized to employ men, purchase tools, etc."

The new superintendent appears to have been a veritable Colonel Goethals of his day, and on October 1, 1796, the canal, with its four locks was so nearly completed that the directors announced October 18 as the date of opening. A formal event was planned which, as the *Courier-Citizen* history states, proved "somewhat unfortunate," for "as the first barge carrying many notables was passing through the

first lock, witnessed by hundreds of spectators, the sides of the lock burst, and boat notables, visitors and all, took a bath together. It was remarkable that none was killed or seriously injured."

As the first of its kind in the New World the completion of this canal was widely heralded throughout the United States. A local consequence of much moment was to inaugurate and perpetuate the Proprietors of the Locks and Canals on Merrimack river, under whose auspices has occurred a great deal of the manufacturing development of Lowell and other cities of the valley.

This canal, the first of Lowell's extensive system of waterways, was not conceived of as a water power project. "The canal thus completed," wrote Mr. Lawson, "was successful in its main object of facilitating the transportation of ship timber, lumber and produce to Newburyport and the mouth of the river, but paid small dividends, at long intervals, probably averaging less than four per cent. upon the total outlay."

The organization which was formed under the style of "The Proprietors of the Locks and Canals on Merrimack River," after a petition for incorporation signed by Dudley A. Tyng, William Coombs, Joseph Tyler, Nicholas Johnson and Joshua Carter, was endowed with extensive privileges, having the power to take land by eminent domain, to levy tolls and fix rates in accordance with the following stipulations:

For passing the locks and canals at Wickasick and Patucket Falls, to be received at Patucket, for every thousand feet of pine boards, two shillings; for every thousand feet of two and a half inch pine plank, six shillings, and other pine plank in proportion thereto; for every cord of pine wood, eight pence; for every cord of other wood, one shilling; for every thousand feet of barrel staves, two shillings; for every thousand of hogshead staves, three shillings and six pence; for every thousand of pipe staves, five shillings; for every ton of oak ~~timber, one~~ shilling and six pence; for every ton of pine timber, ten pence; for every boat or other vessel, at the rate of one shilling for every ton burthen it is capable of conveying, whether loaded or not; for every mast, at the rate of one shilling for every inch of the diameter thereof at one third of the length from the largest end; and for all articles not enumerated in proportion to the rates aforesaid for passing the locks, canals and passageways at Hunt's, Varnum's, Parker's and Peter's Falls, one half of the foregoing rates; for passing the locks and canal of Peter's Falls only, one quarter of the foregoing rates. And on all articles having passed the locks, canals and passageways of Patucket Falls, one half only of the toll herein established, to be paid at Peter's Falls, shall be received; and for passing the locks, canals and passageways of Bodwell's Falls and Mitchell's Falls one third of the rates hereinbefore established, to be paid at Patucket Falls, subject to a deduction of one third thereof on all articles having paid toll at Patucket Falls.

These rates of toll were in 1804 further regulated by the Legislature. The Locks and Canals Company, it may be added, in this period of its history, was hardly to be regarded as a markedly successful concern, the more so as, in its primary function of carrying lumber, it soon had a formidable competitor in the Middlesex canal, the story of which must be narrated with some fullness of detail. In 1822 the proprietary rights of the Locks and Canals Company suddenly assumed a new significance.

The Middlesex Canal—Canal building across country, to afford cheaper transportation, had, as everybody knows, a remarkable vogue in the United States between the beginnings of industrialism and the introduction of George Stephenson's "Iron horse," the Erie canal between New York and the Great Lakes ranking as the superlative achievement.

The priority in this type of American transportation of the Middlesex canal, whose northern terminus was on the ancient John Sagamore reservation at Middlesex Village, has given to the history of this construction unique interest to residents of Lowell and the other towns on its route. Its opening occurred in the first years of the nineteenth century. It was successfully operated until long after Lowell had been incorporated as a city. Men now living have personal reminiscences of the picturesque traffic which was carried on over the stretches of quiet water between Middlesex Village and Charlestown. Those recollections have been embodied in valuable papers such as, in especial, those of Judge Samuel P. Hadley, whose father was manager of the locks at Middlesex Village and who as a young boy was personally acquainted with boats and boatmen on the canal. The Middlesex Canal was finally abandoned when because of much stress of competition from the railroad, it had ceased to pay. The condition of its bed over most of the distance from Concord river down to Mystic Lake in Winchester in such as, frequently of late years, to have prompted the suggestion that at no great expense the canal might be rebuilt to the considerable benefit of several manufacturing communities reached by it.

This was not the first enterprise of the kind to be chartered in the United States, for in 1792 the Massachusetts Legislature granted permission to General Henry Knox and others to construct a canal connecting the Connecticut river with Boston harbor. This latter project presumably appeared to be too great for the resources of the promoters, for it never passed the initial stages. A year later, however, the Great and General Court entertained a proposal from several prominent gentlemen of the Bay State to project a canal from the most southeasterly angle of the Merrimack to tide water in Charlestown. The original act incorporating the proprietors of the Middlesex

canal was signed by Governor John Hancock, June 22, 1793. The incorporators were James Sullivan, Oliver Prescott, James Winthrop, Loammi Baldwin, Benjamin Hall, Jonathan Porter, Andrew Hall, Ebenezer Hall, Samuel Tufts, Jr., Aaron Brown, Willis Hall, Samuel Swan, Jr., and Ebenezer Hall, Jr. By their charter they were authorized to "cut" a canal from the Merrimack river to Medford [Mystic] river.

Out of this permission grew the first American traction canal of a type that was already familiar in England and on the continent of Europe.

The moving spirit in this undertaking was Colonel Loammi Baldwin, fourth in descent from Henry Baldwin, one of the original settlers of Woburn and son of James and Ruth (Richardson) Baldwin. An early exponent of the engineering sciences, Colonel Baldwin established in an active lifetime many claims to an honorable place in American annals. He was born in Woburn, January 21, 1745, and died October 20, 1807. As a student at Harvard he excelled in mathematics to such an extent that his choice of surveying as a profession was natural. In the Revolution he entered service as a major, taking part in the battle of Lexington Green on April 19, 1775. He fought at Long Island and was with Washington when the Hessians were captured at Trenton. In 1777, due to failing health, he was retired with the rank of colonel. From 1780 to 1794 he was sheriff of Middlesex county. He sat in the Legislatures of 1778, 1780 and from 1800 through 1804. His experimenting with horticulture resulted in his creation of the apple which bears his name. To the imaginative capacity and enthusiasm of this distinguished man of Middlesex county was due, in largest measure, the success of the plan for a Middlesex canal.

The other chief figure in the organization of the canal was Governor James Sullivan. This eminent statesman and jurist, born at Berwick in the Province of Maine in 1744, was for six years a judge of the Supreme Court of Massachusetts, and then, from 1790 to 1807, he was Attorney-General of the Commonwealth. In 1807 and 1808 he was Governor of the State. He was one of those who foresaw the new Nation overspread with a network of canals. His son, John Langdon Sullivan, continued for many years to manage the affairs of the Middlesex Canal Corporation.

That water drawn from the Merrimack might be locked down by successive steps to the Mystic appears to have been the original notion of the promoters of the Middlesex Canal. When, however, a celebrated English engineer named Weston undertook a survey of the proposed course he promptly noted that the source of water supply must be the Concord and not the Merrimack, for the reason that the level of the former stream at North Billerica is about twenty-five feet

above that of the river at Middlesex Village at mean stages. The water consequently must flow downward in two directions from the peak at Billerica. This discovery accounts for a second act passed in February, 1795, which also contained a provision empowering the proprietors "to render the waters of Concord River boatable as far as Sudbury Causeway and as much farther as the same can be usefully improved for that end." Under authorization of these two acts the Middlesex canal was built between September 10, 1794, when the first actual work was done and June 22, 1803, when, with the Mystic River terminals finished, the proprietors applied for permission "to complete the same to Charles River and to effectuate the means of communication between the said canal and the town of Boston across Charles River by boats."

The Middlesex canal, thus projected and destined to be for a time of great consequence to the town and city of Lowell, was a considerable construction for its time. It cost half a million dollars. The average width was thirty feet, the depth four feet. There were twenty locks, seven aqueducts and the waterway was spanned by several bridges. The route was as follows: From Charlestown mill pond it passed through Medford, crossing Mystic lake by means of an aqueduct (remains of which are still conspicuous), and Winter pond by another aqueduct, to Horn pond in Woburn. Thence through Woburn and Wilmington parallel to the present line of the Boston & Maine railroad, Southern Division, it crossed the Shawsheen river by a massive aqueduct of one hundred and thirty-seven feet and reached the Concord at Billerica Mills. Entering this river by means of a stone guard lock it crossed with a floating towpath, and headed toward the Merrimack on the other side through another guard lock. From North Billerica it descended over a course of five and one-half miles through the eastern part of Chelmsford to Middlesex Village. It was fed exclusively from the Concord river. As Judge Hadley has said, "No drop of Merrimack river water ever entered the canal, for at the point where boats could pass out into the larger river, were three locks, each about eighty feet long, provided with four sets of gates of the type called 'balance-lever' gates." The total length of the canal between Charlestown and Lowell was twenty-seven and one-half miles.

The financing of the Middlesex canal seems not to have been attended with great difficulties. In the first years Colonel Baldwin's advocacy and management were so generally approved that capitalists invested their money with confidence in the prospects. The stock was divided into eight hundred shares. It sold in 1794 at \$25 a share. By 1803 it had risen to \$473 and in 1804 it touched \$500. After that year the prices receded, though it was still quoted in 1816 at around

\$300. Benjamin Walker, who contributed a notable paper to the series published by the Old Residents' Historical Association in May, 1886, recalls the fact that the proprietors of the canal experienced hard times during and immediately after the war of 1812. For about six or seven years assessments instead of dividends were the rule. Then about 1819 began an era of marked prosperity which was not terminated until the railroad came in to offer a means of transportation that was not only quick but reliable throughout the year.

In the general story of navigating on the Merrimack, the Middlesex canal supplies one of the chief chapters. John L. Sullivan, who succeeded Colonel Baldwin, as superintendent of the canal, was a man of much business energy and drive, who became interested in steam navigation immediately following Fulton's successful demonstrations on the Hudson. In 1814 Sullivan obtained a charter to build boats after models of his own. His first effort was a stern-wheeler, which was operated for a time on the canal, but which created such a wash that it injured the banks. He persevered and a little later extended a steamboat service up river to Concord, New Hampshire.

On June 22, 1819, the "Concord Patriot" extended to Mr. Sullivan the courtesy of what would now be called a "reading notice." "The citizens of Concord," it stated, "have for two weeks past been much gratified with the appearance for the first time, of a steamboat in our river. A good portion of the ladies and gentlemen in town, availed themselves of the very polite invitation of the proprietors to take pleasure rides up and down the river in Mr. Sullivan's steamboat." It is notable that Mr. Sullivan originally purposed to use his steamboat for towing freight carriers up the Merrimack, but he soon found that the rapids above the mouth of the Nashua were so strong that the craft barely made her own way against the current.

Much of the freight and passenger traffic of the manufacturing community that was slowly growing up at the falls of the Merrimack and Concord was by way of the Middlesex canal. Like all canal transportation this had a picturesque color of its own, which later annalists have liked to revive. The long flat-bottomed boats, drawn by horses, were called "gondolas," a name which is said still to be applied to similar boats on the Delaware & Hudson canal.

The captains of the "gondolas" were almost universally native New England men of good character and reliability.

"The bow hands," Judge Hadley recalls, "were a hard working and, it must be confessed, although there were some exceptions, a hard drinking class; but I can remember but few cases of drunkenness among them when about their business. The favorite, and, as I remember, the only beverage, was New England or Medford rum, a gallon jug of which somewhat fiery stimulant was always to be found

in the captain's chest under the steering sweep in the stern of the boat."

Not much imagination is needed to picture lively scenes at the tavern in Middlesex Village after it had become a rendezvous of the canal employees. Frequently fifteen or twenty boats would spend the night at the locks, and the crews would make merry in the barroom. "Flip" was the high-class beverage of the day, but for the most part the canal men bought black strap, a mixture of rum and molasses, at three cents a glass. "Plenty of drunkenness, Uncle Joe, in those days," Benjamin Walker queried of an ancient boatman who was discoursing on the good old times. "Bless your heart, no!" was the reply. "Mr. Eddy didn't put up with no drunkards on the canal. They would drink all night, sir, and be as steady as an eight-day clock in the morning."

The horses by which this canal boat service was carried forward were hard-worked animals in a day when there was no Society for the Prevention of Cruelty to Animals. Their greatest liability to suffering was from galling at the collar. The captains, it is recalled, were usually very considerate of their valued motive power, though occasionally one was so careless as to rouse the ire of Judge Hadley's father, for many years in charge of the locks at Middlesex Village.

Much business was done on the Middlesex canal by chartered companies. After 1815, for example, a fleet of about twenty-five boats was operated by the Merrimack Boating Company, which had been organized in New Hampshire. Vast quantities of timber for boards, spars and masts came down river to the head of the canal and thence, a "shot" at a time, were sent through the locks and on toward Charlestown, often towed by teams of stout oxen. Passengers were carried by a regular packet service which left Middlesex Village on Mondays, Wednesdays and Fridays at eight o'clock in the morning, arriving at Boston about two in the afternoon. The fare for this journey, a very delightful one in pleasant weather, was seventy-five cents.

Travel was permitted on the Middlesex canal on Sunday, but "in consideration of the distance from home at which those persons using it generally are, it may be reasonably expected that they should not disturb those places of public worship near which they pass, nor occasion any noise to interrupt the tranquility of the day. Therefore it is established that no Signal-Horn shall be used or blown on Sundays."

Winter, of course, interrupted navigation on the canal. Before the service was resumed in April it was customary to draw off the long reaches between locks. That meant a great opportunity for small boys all the way from Middlesex Village to Medford, for in the shallow pools left in the bed of the canal were rich hauls of chubs, suckers, eels and other fish. The growth of water weeds was a source

of persistent annoyance to the canal manager, for these often seriously impeded the passage of the boats. One of the reediest sections of the canal was that known as "the swamp" crossing the outskirts of the present city from Middlesex Village. Here each summer it was customary to employ men to wade up and down this stretch of water mowing the weeds. The decaying flotsam thus produced drifted slowly down to the locks at Middlesex and thence was allowed to pass out into the Merrimack.

One closely identified for many years with the management of the Middlesex end of the canal was Samuel Page Hadley, born August 4, 1794, and died June 1, 1872, the father of Judge Samuel P. Hadley. The elder Hadley early in 1815 was employed in construction work on one of the dams by means of which Mr. Sullivan planned to make it possible for packet boats to run to Concord. On the completion of this work he went on board the boat that made the first trip from the New Hampshire capital to the Hub. Thereafter many years of his life were spent in the service of the canal proprietors. Shortly after his marriage, in 1820, to Belinda Butler, of Pelham, he moved to Middlesex Village and occupied the three-story house later occupied by Sewall Bowers. In April, 1824, he was given charge of the locks, succeeding Cyrus Baldwin, brother of the engineer, Loammi Baldwin. His duties were manifold: to maintain the locks, issue passports and waybills, keep a record of lockages and loadings, collect tolls and attend to repairs. During the season the position called for very arduous work. In winter Mr. Hadley had time of his own which to some extent he utilized as a wood measurer, an employment in which he was expert.

Many documents concerning the operation of this property were kept by Mr. Sullivan in a scrapbook which is now in the special libraries department of the Boston Public Library. These admirably supplement the reminiscences of many of the older residents of Lowell. Under the caption of "Middlesex Canal Navigation," a notice, undated, but believed to belong to the first decade of the nineteenth century, gives details of the conditions imposed by the proprietorship upon shippers and passengers. It is as follows:

The public are informed that a large Boat, called the Washington, conveying upwards of thirty tons, covered so as to secure goods and passengers from the rain, and having two commodious rooms in her, will proceed from the head of the canal (having laid there one day previously to receive freight) on every Thursday morning, and arrive at Charlestown the same day before night. She will remain at Charlestown from Thursday to the next Tuesday, to receive freight, in which interim she can proceed over to Boston to deliver freight brought down the Canal, or to take on freight to be transported into the country. The Boat is drawn by two horses, having a relief on the

way, and conducted by Mr. Wardwell. The passengers will bring their provisions on board, as there can be no delay to go on shore for refreshment. The passage money is four cents a mile, and passengers will be taken on and landed where they shall choose. The toll for Canalage, is, at the rate of $1/16$ of a dollar for a ton each mile. And the expense of transportation in the boat is three cents and an half for each mile. The property will be secure from hazard or accident, and delivered to the owner or his consignee where he directs. If nobody appears to take it, the Agent of the Canal Corporation will hold it, subjected to payment of storage, until the owner or his consignee appears. The toll and transportation between Charlestown and the head of the Canal is twenty-eight miles. Goods brought to, or carried from, Boston, will pay for thirty miles. Goods will be taken in and landed at Medford, Woburn, Wilmington and Chelmsford. But this must be done so as not to prevent the Boat from effecting a punctual arrival at the ends of the Canal. There are other boats ready on the Canal to proceed when there shall be business for them. The regulation suggested will apply to the other boats, subject to such alterations as experience shall dictate for all the boats employed.

Middlesex Village, with its well kept houses, its historic tavern and its old New England meeting house (now no longer *in situ*) was peculiarly a creation of the Middlesex canal. The land between Black brook and North Chelmsford was originally, as has been observed, the John Sagamore plantation, a tract especially favorable to raising corn. By the Indians this land was sold to Lieutenant Henchman, who disposed of a part of it to a Mr. Cragie and another part to members of the Howard family. Through Mr. Cragie or his grantees some of the lands came into possession of Captain Tyler, who moved thither from Wamesit Neck.

Before the canal came, the three or four houses and a tavern composing the hamlet could hardly be called a village. The residences of which there is record were the Willard Howard house, Jerathmel Bowers house, the Clark house at the ferry and a cottage house and barn which Judge Hadley describes as being "between the old tavern and the ferry, and known in my childhood as the Sawin house, that being the name of the family who occupied it." According to tradition the Deacon Adams house on Baldwin street was formerly a shop at the corner of Middlesex and Baldwin streets, but was later moved back and made over into a dwelling. The tavern, as it still stands at this writing, is obviously an outcome of several additions. It was a natural location for a public house prior to the building of the Pawtucket Bridge, for Clark's Ferry was a funnel through which traffic poured to and from Dracut, Pelham, Windham and Derry.

The landlord of the Middlesex tavern in the first years of the century was Jacob Howard, who ceased to purvey food and drink about 1816, and who was succeeded by Jesse Smith, to be followed in 1820 by Simeon Spalding.

Near by on Wood street, in what is believed to be the oldest house in Lowell south of the river, lived Colonel Joseph Bowers, recalled as a typical New England farmer of the better sort, "honest, energetic, upright and downright." He was locally famous for his fine cattle. "He always," writes Judge Hadley, "kept a number of yoke of strong oxen which, in the canal season, he used in towing rafts of masts, spars and lumber logs from the head of the canal at Middlesex and to tidewater at Charlestown." The house in which Judge Hadley has lived during his long and honorable career was built in 1822 by Harvey Burnett. Here for a time Francis Brinley had his law office, in the east room. The first-hand quality of Judge Hadley's reminiscences of canal-boat days is evidenced by his statement: "I suppose I am one of the very few surviving employees of the Canal Corporation. I not only worked for it, but I fished in it, I swam in it, I came very near being drowned in it, I sailed my little boats upon it, I skated upon it, and I knew every part of it. From early childhood until the close of the canal, I knew every captain and boat man who worked upon it."

Manufactures Before the Factory System—The manufacturing interests of the Lowell district continued to be relatively a minor consideration as compared with agriculture down to the date at which the modern factory system was introduced, even though the existence of much industry of a primitive sort in this neighborhood cannot be forgotten. In general, nevertheless, the importance of manufacturing was as yet not so great but that it might be depreciated as detrimental to the fisheries. The Hildreths, of Centralville, were notably hostile to developments which threatened to interfere with the ancient privileges of fishing at the Great Bunt. Colonel William Hildreth was chosen fish ward on April 6, 1801, and in 1817 the office was bestowed simultaneously upon Dr. Lieutenant Israel Hildreth and his son Dr. Israel, Jr. "Their revenue," says Captain Reade, "was unfavorably affected by the dams, canals and manufacturing establishments of the companies and corporations that were more interested in the development of Lowell than in the preservation of Merrimack River shad, salmon or alewives."

General William Hildreth, as State Senator, was instructed in May, 1801, to present the remonstrance of the town of Dracut to the effect "that the creation of a dam across the Merrimack river at Pawtucket falls in the manner proposed by the petitioners to the General Court at the last session will, in the opinion of this town, totally destroy the fish in the said river and deprive the people of the important privilege which they for a long time, even from time immemorial, have enjoyed without interference of taking near their doors the most delicate food and much of the real necessities of life; and no other purpose can be answered through a gratification of the avari-

cious feelings of a few individuals who must be unacquainted with the real effect of the proposed measures or regardless of the public good."

In other respects members of the Hildreth family opposed the Locks and Canals Company in questions of riparian rights long before the large manufacturing companies of Lowell were in existence.

A few beginnings, nevertheless, of modern industrial establishments, despite such opposition, were already notable before the War of 1812, and after the second peace with Great Britain, manufacturing received something of an impetus in this territory. Data have been preserved regarding at least three of these pioneer manufactures of the city.

The most considerable manufacturer of the pre-Lowell decades, unquestionably, was Moses Hale, after whom Hale's brook was named, a man of decided mechanical ability, a prototype of many of the business men who later in the nineteenth century helped to create the industrial city of now.

Moses Hale was born at West Newbury in 1765, but passed most of his youth in Dracut, where his father, Ezekiel Hale had built on Beaver brook a fulling mill, the chief business of which was to dress the cloth woven in nearby homes.

In 1790, shortly after his father's death, Moses Hale moved over to East Chelmsford and there constructed a fulling mill on River Meadow brook, buying the land and water-power privileges from Moses Davis, whose daughter he had married. The new mill was adequately equipped for fulling, dyeing and dressing home-woven cloth. All the preliminary work was done in homes, where the farmers' wives and daughters carded the wool, spun it into yarn and wove the fabric on the hand loom.

Hale's mill, on River Meadow brook, soon became famous for the expert manner in which the cloth was finished. "For men's wear," records Mr. Arthur Gilman from notes supplied by B. S. Hale, "the cloth was fullled up thick, then napped with teasels, sheared and pressed." Hale early saw the advantage of carding wool by machinery. In 1801 he bought a picker and carding machine, the first of its kind to be operated in Middlesex county. The new apparatus proved popular. The farmers brought to the mill their wool packed in sheets. After it had gone through the carding machine the rolls were carefully taken up by the handful and laid back in the sheets. The cloth was then folded about the wool and secured with thorns.

This factory on Hale's brook was a pioneer in introducing several other improvements. Shears were at that time used for shearing the cloth, the device consisting of knives set at angle and moved horizontally, with a crank motion. Presently Mr. Hale adopted twisted blade

shears, which gave a better surface. Finding the cutting of dye wood by hand too slow, he framed up a cutting knife that worked between a stationary and a movable timber. His gig for napping cloth was a cylinder set with teasels.

Hale was alive to the value of publicity for his industry. About 1806 he made up a piece of the cloth from the finest wool that could be procured. The manufacturer carded it personally with his best skill and had the cloth woven by one of the farm women whose work was celebrated for beauty of texture. When the fabric came back to the factory it was colored with the richest of indigo and dressed in a superior manner. From the bolt thus obtained a complete suit was made up for General Joseph Bradley Varnum, then Speaker, to wear at the opening of the National House of Representatives. These garments were widely advertised as the first suit of domestic manufactured fabric ever seen on the floor of Congress.

Besides his woolen mill, Moses Hale had a grist mill, situated about where the Lowell Bleachery now is. In 1812 he built a handsome three-story brick mansion, long a landmark on Gorham street. His customers and others from the neighboring towns flocked to the raising which was one of the social events of the period.

Another Concord river manufacture of this period was that carried on by John Goulding, who later settled in Worcester, and there invented, among other devices, a loom for weaving bootstraps. Of his East Chelmsford experiences, Mr. Goulding wrote later in life: "I settled there in the year 1812, had a factory built by Fletcher and Whiting, on Concord River; hired it for eight years at \$200 a year; carried on the business of spinning cotton yarn in a small way, as all our manufacturing was done at that time; spun about twenty pounds of yarn per day; also had a carding machine, making cotton and wool machinery; made looms for weaving suspender webbing, and a tape loom to weave thirty-six pieces at one and the same time." This building occupied by John Goulding was later taken over by Mr. Hurd for manufacturing satinets.

A third and very interesting industry of the early nineteenth century was the glass manufactory at Middlesex Village. This was comparatively short lived, after the fashion of the glass industry in New England, for no manufacture is more dependent than this upon a plentiful supply of cheap fuel. So long as white pine logs could be rafted down the Merrimack and fed to the kilns without loss of profits otherwise available the glass works in Chelmsford had a *raison d'être*. Even in the middle decades of the nineteenth century, however, pine timber became too valuable to be burned in that way, and the glass company, after a period of operation further up river at Pembroke, finally became inactive.

The glass factory, according to data contributed by Ephraim Brown in a paper on "Three Glass Manufactures," read in November, 1881, before the Old Residents' Historical Association, stood on the easterly side of the Middlesex canal and about thirty rods south of Middlesex street. It was established in 1802 by Hunnewell and Gore, of Boston, and was operated under one management and another until 1839, when new works were established at Pembroke. The product was chiefly window glass, which was sometimes criticised on account of its iridescence, or rainbow coloring, apparently an accidental characteristic. The materials of the manufacture were assembled from opposite directions. Over the Middlesex canal from Boston came the sand, of New Jersey origin, the soda ash, potash, lime and salt. The fuel was rafted down from the pine plains about Concord, New Hampshire.

The glass works at its best period employed from sixty to seventy people, making an important accession to the population of Middlesex Village. Writing in 1820, Allen, in the Chelmsford history, says of the factory: "It is now in a flourishing state. About three hundred and thirty thousand feet of window glass are annually made, or three thousand, three hundred boxes of one hundred feet each, which at \$13 per box will amount to \$42,900. * * * The manufactory consists of two furnaces, three flattening irons, two tempering ovens, six ovens for drying wood, cutting, mixing and pot rooms, kilns for burning brick, a mill house and sand house."

In the personnel of the force employed at the glass works may be noted the beginning of the influx of skilled workers from Europe which later has helped to make Lowell what it is. The blowers were Germans, as proved by such names among them as Hirsch, Weber, Baruch and Koch. Of the glass factory, nothing now remains except one of the boarding houses for operatives.

The manufacture of ammunition in Lowell, which has long been a standard industry of the city, and which had a remarkable acceleration at the outbreak of the European War, dates back to the years just following the War of 1812. The first powder mill was started by Oliver Whipple, born at Weathersfield, Vermont, in 1794, and a newcomer at East Chelmsford, where he married a daughter of Moses Hale. Mr. Whipple undertook, with much success, to build up a business in gun powder. His works speedily achieved such reputation as to induce a visit from the Governor and Council of the Commonwealth. Mr. Whipple did much to encourage building in the Moore street section of Lowell.

The gunpowder made at the Whipple works met with favor and its reputation led to a demand for large quantities for exportation to the Far East and elsewhere. In order to have a suitable storage house

at tide water, Mr. Whipple bought Spectacle Island in Boston harbor, which was sufficiently protected to make explosions unlikely. Transportation of gunpowder in large quantities was then, as now, extremely dangerous. The manufacturer constructed a road from his factory to connect with the old Boston road over which, in the dead of night, were sent cart loads of powder. "The hoofs of the horses," writes Mrs. Griffin, in her interesting reminiscences of "Old Homes and Byways," "were muffled in bagging and cotton pads so that their iron shoes should strike no sparks from the stones in the roads and thus ignite the powder. Slowly and steadily the great horses marched down the unfrequented by-ways, as far as possible, until they reached Boston, from which point the gun powder was taken, a boat load at a time, to the island in the harbor."

Old Residences—Just how the former Wamesit Neck was peopled at the beginning of the nineteenth century was shown in considerable detail in reminiscences contained in a paper prescribed to the Old Residents' Historical Association by Z. E. Stone in 1874. This survey of a bygone age indicates that downtown Lowell, while, of course, essentially rural in character in 1802, was far from being a wilderness, peopled by a few needy fisher folk.

Coming eastward from Middlesex Village, the composition of which has already been described, one first encountered the house occupied by Silas Hoar, near where Gage's ice houses now are. Opposite it was the residence of John Putnam. Close by the falls was a place then owned by Amos Whitney; it afterward became the home of Jonathan Bowers. Not far away lived Archibald McFarlin, father of the late Luke McFarlin, remembered by people now in middle life as proprietor of the private boat house adjoining the Vesper Boat Club.

Captain John Ford, of Revolutionary fame, was still living in the residence which, not many years ago, was remodeled to make the present Earl and Lambert houses. Still standing at the corner of Pawtucket and School streets is the Spalding house which in 1802 was a tavern, where they who braved the dangers of crossing Pawtucket bridge might fortify their spirits. This house, now patriotically preserved by the Molly Varnum Chapter, Daughters of the American Revolution, was built about 1760 by Robert Hildreth. It was bought in 1790 by Joel Spalding. For a time it was known as the Davis tavern. On the opposite corner toward the river, the site of the ornate Frederick Ayer mansion of later days, stood the home of Captain Phineas Whiting. Between this and the bridge over the river was the place of Luke Bowers. Over the way from Captain Whiting's, on what became the Gerrish corner, lived Ashahel Stearns.

Then, close together on the right-hand side of the street, were

Jonathan Fiske and a Mr. Livingston, the latter at the corner of Arlington street, where some time previously Captain Whiting had had a shoemaker's shop. Across the street, on land later to be occupied by the Shattuck residence, was the cooper shop of Joseph Chambers; this afterwards was taken over by Artemas Holden, a young man from Townsend who became one of the city's substantial business men.

An unoccupied stretch of Pawtucket street seems thereafter to have intervened, for the next structure mentioned is a school house which stood about where the Lowell Hospital is to-day—that is between the heads of Salem and Merrimack streets.

Continuing toward Little Canada, for Merrimack street did not yet exist as a highway, one found at the foot of the falls the residence of Benjamin Melvin and not far from it the saw mill and grist mill run by Nathan Tyler. Some forty rods due east was encountered the Moses Cheever place and then, in the neighborhood of Monument square a blacksmith shop operated by a Mr. Hall. At the corner of Merrimack and John streets lived Josiah Fletcher.

Pasture land or tillage seems to have been continuous where now are Lowell's busiest corners, those at which Central, Bridge and Prescott streets meet the axial highway. The Nathan Tyler farm, at this point, was one of considerable extent, extending up Merrimack street at least to Palmer street. In the Tyler house, one of the finest of the neighborhood, for it was built with great care from lumber personally sawed by Mr. Tyler at his mill below the falls, was reared a goodly family of seven sons and three daughters, ancestors of several of the most foremost citizens of the city of to-day. Mr. Tyler, it is recorded, occupied this house down to the time of the coming of the Merrimack Manufacturing Company, when he sold his estate and moved to Middlesex Village to the familiar "Tyler homestead," which, as Mrs. Griffin wrote in 1913, "is now occupied by Mrs. Samuel Tyler and her daughter Miss Susan Tyler, the ladies who were the donors to this city of the magnificent gift of Tyler Park." The original Tyler house at Merrimack square, after it was bought by the Merrimack Company, became a hotel under the style of the "Old Mansion House," of which Captain Jonathan Tyler was long landlord.

The Concord river was crossed on a bridge that was built about where the present structure is.

The first house in Belvidere was that of Joseph Tyler. Next came one of the most famous of local residences, "the Gedney House," concerning which Mrs. Griffin has written interestingly, stating that it was built and first occupied by Timothy Brown about 1750, a gentleman who kept a tavern and operated a ferry at this point. By Mr. Brown the house was sold to a Mr. Woodward; he to Philip Gedney. Then it came into the hands of Judge Edward St. Loe Livermore. Its

later history includes its ownership by John Nesmith, who sold it to the Sisters of Charity, by whom it was used as the ell of St. John's Hospital.

These statements about the Old Yellow House are doubtless substantially correct, except that the date given of its erection is impossible, if, as Mrs. Griffin states, the lumber was obtained from Captain Ford's saw mill. It presumably was built some time before the Revolution, but not as early as 1750. John Ford was only twelve years old in 1750. Mr. C. C. Chase found data to indicate that Ford supplied the timber for the house.

Mr. Stone says that according to his recollection there were one or two other houses in what has since become Belvidere. The indefatigable Mrs. Griffin has supplied some details about those. Out on Andover street, at the corner of Old County road, was the Moses Worcester farm, bought in 1748 from Samuel Hunt. The site is still occupied by the home of Mrs. Richard W. Baker, directly descended from Moses Worcester; and over the way still stands in good preservation, the residence built in 1802 by Eldad Worcester, grandson of the original settler. On Clark road was built in 1790, by Lieutenant Thomas Clark, son of Captain Jonas Clark, of the Clark's tavern at Middlesex Village, a house which has been continually in possession of members of the Clark family. These, and perhaps the original Hunt homestead, were doubtless the houses recalled by Mr. Stone.

On the cross road which later became Central street, Joseph Warren kept a tavern about where the American House to-day offers hospitality. On Lawrence street Nathan Ames and John Fisher had their respective houses. Davis corner, out on Gorham street, gets its name from the Davis farm house, Johnson Davis dwelling there in 1802, as did his ancestor Elisha in earlier days of Chelmsford. Moses Hale's residence, already mentioned in connection with the beginnings of powder manufacture, in this part of the city, was just beyond the brook that bears his name. Where the railroad tracks cross Gorham street stood the homestead of Ephraim Osgood. Moore street takes its name from Joseph Moore; a one-story cottage that belonged to the Moore family is said to date back, perhaps, to the Revolution. On the old Boston road, near the Chelmsford line, was Peter Marshall. The "Old Marshall Tavern" on Parker street is believed to have been erected about 1790. A little west was Sprague Livingston. On a cross road to Middlesex Village were Robert and Stephen Pierce, living in the same house. Captain Benjamin Butterfield's house was on Hale street. Between Chelmsford and Liberty streets lived Levi Fletcher. Near the old tannery was a school house and opposite it resided John Gload. On Chelmsford street was Isaac Chamberlain. Beyond him was Henry Coburn, and to his northwest was the old

homestead of Benjamin Pierce. Pine street, which was then a traveled road, had on it the residence of Zebulon Parker, situated about one hundred rods from a road leading across to the falls, being the present School street. Along Pine street, in the direction of Middlesex Village, was Jeduthan Parker and beyond him the Worcester house in which the father of Eldad Worcester lived. On School street, Micah Spalding had his house in the depression through which the canal passed. The popular appellation of "Mike's Bridge" long perpetuated his name. At the corner of Summer and Thorndike streets was the house of Major Joseph Fletcher; at Broadway and Willie streets, Andrew Fletcher. This account takes no notice, of course, of families across the Merrimack.

From this survey of the old Neck it is seen that at the beginning of the nineteenth century there were in the older part of Lowell, exclusive of Middlesex Village, Pawtucketville and Centralville, perhaps, fifty houses, inhabited by intelligent self-respecting people, some of whom were even then laying the foundations of fortunes now held by their descendants.

Church and School at East Chelmsford and West Dracut—The religious and social life at the falls and thereabouts, prior to the influx of outsiders who came to enjoy the advantages of a new manufacturing village, was obviously that which survives in a few comparatively unchanged New England communities of to-day.

During and immediately after the Revolution there was no churches in territory now claimed by Lowell; and down to the opening of St. Anne's there were but two, the white Presbyterian meeting house in West Dracut and the Congregational church at Middlesex, later removed to North Chelmsford.

To the older of these two edifices repaired for worship not only the people of Pawtucketville but many from the Chelmsford side of the river. Others, those especially living in the highlands beyond the depression where the Pawtucket canal was let through, regularly hitched up and drove to Chelmsford Centre. Occupants of the farm houses of Belvidere had their church affiliations with Tewksbury Centre; the Hildreths and others of the region below Christian Hill worshiped in Dracut, after 1794, at the Centre.

The events leading to the establishment of the oldest of the Lowell churches now in existence were related by the late Major Atkinson C. Varnum in his "History of Pawtucketville Church and other Congregational Churches of Lowell." His account is pertinent to the history of Lowell.

The population of the eastern portion of the town of Dracut had continued to increase more rapidly than that of the original homes of Varnums and Coburns. In March, 1794, it was voted by the town to

tear down the old meeting house, supposed to have been a few rods east of the Merrimack Woolen Mills on Beaver brook. The decision was to rebuild on the "Central line," that is on the continuation of the present Bridge street. The outcome was the building of the Centre Church, or the "Old Yellow Meeting House," long a familiar landmark just beyond the city line.

Against this decision to remove the church further east the Pawtucketville people signed a protest which denied that the chosen location was the "proper centre of said town," and ended as follows:

3d. Because it is making a needless and unreasonable cost to the town when the present house with but little expense might be made to accommodate the people and save the widows and orphans from a burdensome tax when they cannot have a voice in the business. For these and many other reasons we solemnly & firmly enter our protest against all the votes that any way relate towards the building a meeting house at the above described place, & hereby show that we do not consider ourselves held to pay any cost that may arise thereby.

Signed by: Lewis Ansart, Thomas Varnum, Israel Hildreth, Josiah Fox, Moses B. Coburn, Samuel Coburn, Parker Varnum, Ephraim Coburn, Joseph Dean, Abraham Blood, Coburn Blood, Timothy Coburn, Willard Coburn, Solomon Osgood, Jr., Jonathan Varnum, Jr., John Hamblet, Jephtha Coburn, Jonas Varnum, Lide Wilson, Solomon Osgood, Jacob Coburn, Jonathan Varnum, Nathaniel Coburn, Daniel Blood, Joseph Webster, Thadeus Coburn, Saul Coburn, Peter Coburn, Jr., Samuel Cummings, Peter Coburn, Simeon Williams, Solomon Abbott, Jr., Ezra Coburn, Jabesh Coburn, Willard Coburn, Jr., Moses Clement, Jonathan Coburn, Jr., Heseekiah Coburn, Zachariah Goodhue, Jonathan Morgan, Aaron Coburn.

It undoubtedly aided the desire of those objectors to have a church of their own in West Dracut that the nearby opened Middlesex Merrimack bridge was held certain to increase their population and to bring within their sphere of influence the neighborhood about Captain John Ford's mills over the river.

Those who protested finally, on January 9, 1796, received from Colonel James Varnum title to a tract of land on which a new church was soon to be built. This lot was on the east side of Mammoth road, where the Pawtucket church now stands. On June 22 the General Court authorized the incorporation of the West Congregational Society in Dracut. Two weeks later the first parish meeting was held at which Colonel James Varnum was elected moderator, Peter Coburn, Jr., clerk; Parker Varnum, Solomon Osgood and Timothy Coburn, assessors, and Colonel James Varnum, treasurer.

Thus succeeding the original Dracut church, which was in Pawtucketville, was started the oldest church in the city of Lowell at which worship has been continuous to this day. It is interesting that for a number of years this church was of the Presbyterian rather than

the Congregational faith. Shortly after its formation many families on the East Chelmsford side of the river began to attend this church, having obtained from the Legislature a special act thus setting them off for parochial purposes.

The annals of the church at Chelmsford, with which, until after 1820, many of the families of the ancient Neck were still associated, belongs to the history of that town rather than of Lowell. They are unusually copious and satisfactory, due in part to the fact that the Rev. Wilkes Allen in 1820 prepared a history of Chelmsford, which, published at the expense of the town, is accounted as the first book of local history of its sort ever produced in America.

For cemeteries the families at East Chelmsford used either the one still preserved at the corner of School and Branch streets, that over the river near the Pawtucketville church, the Hildreth cemetery, already described, or the one on the heights in Belvidere, which has long since disappeared.

Schooling for East Chelmsford children was not interrupted even during the distressed years of the Revolution. The educational facilities of the time were slight, as judged by standards of to-day, but such as they were they seem to have been maintained scrupulously.

An indication of the territory covered by a single school district is given in a town vote of 1781: "Nine months Righting school 3 mos in Neck so called extending from Mr. Timothy Clarks to the mouth of Concord & to Mr. Simeon Moses & to Mr. Joseph Pierces So to Mr. Philip Parkers." From this specification it is seen that all the children of the triangle formed by a line extending from the Clark place on Baldwin street, Middlesex Village, through the Highlands to Moore street had three months of instruction at a little red school house on School street. The only exceptions were a few who attended the grammar school at Chelmsford Centre. It is proof of the comparatively rapid growth of the Neck that by 1794 in the same territory there were three schoolhouses: One at Middlesex Village, one at Parker and Powell streets and one on Pawtucket street at the corner of Salem street.

The social and intellectual life of the whole neighborhood appears to have received an impetus after 1787. In 1794 the Chelmsford Social Library was established at the Centre, an institution which continued for a century, until succeeded by the present Free Public Library. When the Social Library was started there were but nine libraries in Massachusetts outside of Boston.

A new interest in problems of scientific agriculture was nothing sporadic. There was organized in 1794 a Chelmsford society for the "promotion of useful improvements in agriculture." This movement

was significant of the progressive spirit of the people of this district, for there were, so far as known, at that date but three other agricultural societies in the United States. The association was incorporated February 28, 1803, under the name of "The Western Society of Middlesex Husbandmen." At that time there was but one other incorporated agricultural society in Massachusetts.





CHAPTER VII.

Lowell and the Factory System.

The creation of the first large American factory town at the forks of the Merrimack and Concord was an achievement of the second and third decades of the nineteenth century.

Within fifteen years a rural neighborhood, in which a few old-time manufacturing industries were conducted on a limited scale, was transformed into an active industrial city of a kind now familiar to most districts of the United States, but then regarded as one of the wonders of the continent.

Water-powers were developed in rapid succession. Farm lands were sold to manufacturing companies and private individuals, often with an accompaniment of intrigue and speculation. An influx of operatives, at first from the nearby farms and villages, and later from foreign countries, set in. Many merchants and professional men saw the advantages of settling in a community whose growth was the marvel of New England. Churches and schools were established. The New England town form of government was projected for the expanding community, only to be succeeded ten years later by a city charter, the third of its sort to be granted in Massachusetts. Many of the institutions which now are an essential part of Lowell were started prior to 1836, the year of urbanization. Most of the problems which remain to be solved in a complex society had begun to appear before Van Buren relinquished the presidency of the Nation.

The fact of priority gives any topic an interest that is not wholly factitious; the pioneership of Lowell in the evolution of the American industrial community renders the details of its progressive evolution one of general as well as local significance. Here is material for intensive study of the economic and social changes incident to the coming of modern capitalism in North America.

That which now happened in New England was not, of course, without precedent elsewhere. The factory system, the basic feature of modern industrialism, which was definitely brought to East Chelmsford with the incorporation of the Merrimack Manufacturing Company in 1822, was already well established in Lancashire and other districts of Great Britain. The story of its inception and advancement, and of its progressive adaptation to American conditions, has been interestingly sketched in Jonathan Thayer Lincoln's little book, "The Factory System," and in a more condensed form by the same author in "The American Business Encyclopædia." The general aspects of this phase of social evolution, out of which we have not yet emerged,

are quite pertinent to the special evolution of the city of Lowell. Fully, indeed, to understand how momentous a change was involved in the life of the community on the site of the former Indian metropolis when the great mills began to go up, one needs to have a sure idea of what was involved in the introduction of the factory system.

The narrative of the origin of this system takes one back to the older countries of Europe, where in the eighteenth century it began to be seen that wealth in manufactured articles could be created more rapidly by means of machinery, with use of subdivided labor, than by means of the ancient handicrafts. "Obvious as are the productive advantages of the factory system," says Lincoln, "society did not adopt the new method in a large way until inventive genius had created the modern factory. The early manufactures of textiles and other articles were handicrafts, properly so-called. They were pursued by craftsmen, living and working at their own homes, mostly in rural districts. Down to the beginning of the eighteenth century master-clothiers in the larger towns sent into the surrounding country sections sacks of wool to be spun into yarn, returned to the consignors, and by them redistributed among the weavers. Often members of a single family combined to take care under one roof of the three operations of carding, spinning and weaving. The workers generally carried on more or less farm work at the same time. This domestic system has been praised by advocates of the handicraft revival. It had its pleasant features, but it contained in an exaggerated form evils—such as child labor—which are by some supposed to be peculiar to the factory system."

English manufactures, whether of wool, linen or cotton (which seems to have first been introduced in commercial quantities about 1641) were pursued, as Mr. Lincoln has stated, after the fashion of handicraft down to the date of Richard Arkwright's invention of a spinning frame.

It seems, indeed, to be established that England, although destined to manufacture for the whole world, was somewhat slow in securing its start as an industrial nation. The Anglo-Saxon genius, as Dean Edwin F. Gay, of the Harvard Graduate School of Business Administration, has urged in his Lowell Institute lectures on "The Mechanical Inventions," is "for the practical—for the application of science—but even in these practical works it was for a time more imitative than truly inventive. A letter written in 1701 by a representative of the East India Company in defense of the company's importation of cheap printed and 'painted' cloth from India challenged the national ability to make progress in technical directions and averred that there was 'only one saw mill in all the land,' whereas, Holland had many, and did, indeed, 'abound in mills and engines'."

England's turn, nevertheless, to become a manufacturing country was foreseen in the forefront of the eighteenth century, the epoch in which arose for the first time a numerous and prosperous middle class for whom the hand industries could not turn out articles of clothing and household equipment in sufficient abundance and of the right price to satisfy their rising standards of comfort. The result was a new era which followed closely upon a period in which the artistic handicrafts of Great Britain reached a nearer approximation to perfection than ever before or since. Under William and Mary and Queen Anne, the wood-carver, Grinling Gibbons, and his many assistants and imitators filled palaces and manor houses with wood-work that now ranks among the foremost treasures of art in English public and private collections. The Huguenot iron-worker, Jean Tijou, employed for many years by Sir Christopher Wren, on St. Paul's Cathedral, trained up in his shop a group of native apprentices who for about half a century designed and executed iron gates and grill work, the surviving examples of which are a model for every architect of every country. The early eighteenth century was the day of the "grand tour" to France and Italy, made by young men whose parents could afford it; out of these youthful travels grew a prevalent disposition to become connoisseurs and dilettanti. Many Italian stucco workers and plasterers settled in England. Furniture underwent successive refinements at the hands of Chippendale, Sheraton, the Adames and others whose styles were reflected in American colonial workshops. English silver work and pewter were at their best under the first Georges. The invention of copper rolled or "Sheffield" plate carried the finest silverware designs of the period into the homes of people of moderate means. That marvels of pottery were produced by Wedgwood, Wall and others of the west counties hardly need be said. It was a time of improving taste and expanding luxury, and in this century of enlarging human desires, English wit began, at first imitatively, to take up the problems of cheapening production and of thereby stimulating consumption of commodities. As Mr. Gay says:

England's turn, it seems quite clear, was toward the practical. Very early in England there occurred a great spread of popular belief in the possibilities of science. Indeed this faith became so great that it verged upon the grotesque. It had for one thing this important result that it tempted out the money of private investors for use in enterprise. Among the many valid schemes there were still more "wildcats." One promoter banked so much on the faith of the public in inventive schemes that his prospectus plainly announced that stock was "to be subscribed for a project to be divulged."

This popular faith was reinforced by the example of Holland, where much practical progress had already been made. Holland had shown the way, it was said, and England was counseled to emulate. Wherever Englishmen could lay their hands on a good thing, in the

printing trades, in the manufacture of paper, in the metal trades, they incorporated it into their own industry. Finally, with the increasing subdivision of labor in some of the special industries, a form of the factory system had become developed even before the machines entered.

When the great inventions began, one step of progress literally forced the demand for another. The increased development of the weaving business caused a demand for more yarn, and there was a rapid succession of inventions to provide it. Chief among these Arkwright's water frame literally necessitated factory production, run as it was by water power. With the mule an enormous amount of yarn was produced, and the pressure next began to bear on the weaving side, to make use of all the yarn that was made. Cartwright's loom followed. There was trouble to bleach all this cloth by the old processes, and chloride bleaching was developed.

Thus necessity mothered invention within a single industry. But one industry also caused a demand upon other industries. To provide machines of the type required, the iron supply had to be developed, and for the steam engine it was necessary to produce a cylinder that could be bored with accuracy. The means for mining and transporting coal also required development to meet the demand.

Sir Richard Arkwright's spinning frame, as just intimated, stands at the beginning of the new phase of civilization. The fascinating story of the career of the humble barber of Preston, whose inventions raised him to a baronetcy and made him the father of industrialism, cannot be rehearsed here. It has been told authoritatively in Richard Whately Cooke-Taylor's "The Modern Factory System." Notice should be taken, however, as bearing directly on the changes that occurred in Lowell from 1820 onward, that in 1769 Arkwright obtained a patent for a water frame spinning machine which within a very few years put literally millions of home-spinning wheels out of business. The inventor himself said of this machine, in the preamble of the specification attached to the application for a patent, that he "had by great study and long application invented a new piece of machinery, never before found out, practiced or used, for the making of weft or yarn from cotton, flax and wool, which would be of great utility to a great many manufacturers, as well as to his Majesty's subjects in general, by employing a great number of poor people in working the said machinery, much superior to any heretofore manufactured or made."

This Arkwright spinning frame, operated by power, had spindles that were much more productive than those of the cottage wheel, multiplying many fold the value of the labor of the operator. The frame itself, moreover, was from the first far too cumbersome to be set up in a private house. It required a workshop, a factory, for effective operation. This need of segregation of labor was foreseen by Arkwright, who in the year of his receiving his patent erected at Nottingham an

unpretentious little mill for cotton spinning, its machinery turned by two horses harnessed to a treadmill.

Thus at about the date when the farmer folk of the American Chelmsford and Dracut were drilling their train-bands against the increasing tyranny of the London government was born the system which later was to revolutionize all conditions of living at Pawtucket Falls, and which was to make the present city of Lowell possible.

Other mechanical improvements, as Dean Gay has noted, followed the Arkwright spinning frame, as for example, the inventor's patents of 1775 for carding, drawing and roving machines, to be employed "on preparing silk, cotton, flax and wool for spinning." The new system also made much use of previous inventions, as of John Kayes' fly-shuttle of 1738 and James Hargreaves' spinning jenny of 1767. In 1779 Samuel Crompton, a practical weaver of Bolton, invented the mule-jenny, so-called because, like the crossing of the horse and the donkey, it combined the principles of Hargreaves' jenny and Arkwright's water frame. By this time the most essential machinery was complete; though many subsequent modifications and improvements have been made, in several notable instances by Lowell inventors. The first power loom was fashioned in 1785 by Edmund Cartwright, a clergyman. In that year, too, a Nottingham cotton mill for the first time in the history of the industry installed a steam engine.

These things were happening, it should be recalled, during years in which much manufacturing of the primitive sort was carried forward at East Chelmsford and Dracut Navy Yard, just as in hundreds of other several communities of New England. Precisely as in England before Arkwright's invention, the factory was a clearing house from which yarn spun in the nearby homes was sent out again to the home to be woven on the hand loom, the miller's functions being those of carding, fulling and finishing. The older system was obviously quite different from that which began with Arkwright's plan of having all the processes of textile manufacture carried on under a single roof.

The economies of the factory system from its first days were surprising to whoever became acquainted with them. "A handloom weaver," says Lincoln, "was highly competent if he produced two pieces of shirting a week. Early in the nineteenth century an average power loom weaver wove seven pieces in the same time. Two hundred looms in a factory operated by half as many weavers produced as much cloth as would have come from 875 looms scattered among the households where the women had meals and children and the men gardens and live stocks to look after. Under methods of the present day the disparity between hand weaving and power weaving is even more striking." The sex problem in industry was simultaneously

✓ introduced by the factory. "Women," says Arthur Harrison Cole, in his "History of the Wool Manufacture in the United States to the Establishment of the Factory System," "could now be substituted for men in the process of weaving. The hard labor of operating the harness and 'beating-up' the cloth as it was woven, so as to make it compact and firm, was now obviated."

American men of affairs in the first days of the Republic, as already observed, were more or less excited by the upgrowth of this new form of manufacturing in England. A survey of the situation was made in Alexander Hamilton's celebrated report on domestic manufactures, which gives this impressive list: "Great quantities of coarse cloths, coating, serges and flannels, linsey-woolseys, hosiery of wool, cotton and thread, coarse fustians, jeans, and muslins, coverlets, and counterpanes, tow linens, coarse shirtings, sheetings, towellings, and table linen, and various mixtures of wool and cotton, and of cotton and flax, are made in the household way; and, in many instances, to an extent not only sufficient for the supply of the family in which they are made, but for sale, and even in some cases for exportation. It is computed, in a number of districts, that two-thirds, three-fourths and even four-fifths of all the clothing of the inhabitants, are made by themselves."

That there were more economical ways for spinning and weaving those fabrics now began to be understood. Immediate imitation of these methods, however, was not practicable for various reasons. Trade secrets were carefully guarded abroad. England jealously prevented exportation of machinery that might create commercial rivals elsewhere. Not many people in America understood clearly as yet the economic and social aspects of the industrial revolution that was in progress in Lancashire and Yorkshire. Interest in economic subjects was generally vague, as probably in the minds of the Massachusetts Legislature of 1786, which appointed Richard Cranch, of the Senate, and Messrs. Clarke and Bowdoin, of the House, "to view any new invented machines that are making within the Commonwealth for the purpose of manufacturing sheep's wool and cotton wool, and report what measures are proper for the Legislature to take to encourage the same."

This quest at least led the committee to Bridgewater, where, according to Samuel Batchelder, some machinery made by Robert and Alexander Barr included the Arkwright improvements. As a consequence of a favorable report from the committee the General Court on November 16, 1786, granted the sum of £200 "to enable them to complete the said three machines, and also a roping machine, and to construct such other machines as are necessary for the purpose of carding, roping and spinning of sheep's wool, as well as of cotton wool."

This State aided enterprise at Bridgewater seems not to have succeeded, for it does not again come into the records.

For Beverly is claimed the distinction of harboring the first American cotton factory, though one would hardly say that it entertained the factory system as it is now known. "The Beverly company," states Montgomery in his "History of the Cotton Industry in America," "commenced operation in 1787, and are supposed to be the first company that made any progress in the manufacture of cotton goods (that at Bridgewater had been on a very limited scale); yet the difficulties under which they labored—the extraordinary losses of materials in the instruction of their servants and workmen—the high prices of machines unknown to their mechanics, and both intricate and delicate in their construction, together with other incidents which usually attend a new business, were such that the company were put to the necessity of applying to the Legislature for assistance, to save them from being compelled to abandon the enterprise altogether."

Such, at Beverly, was the beginning of cotton manufacture in North America. The new company experienced difficulties which are a matter of record. In 1790 it received from the State a grant of £1,000 to be so expended as most effectually to further the making of cotton piece goods in the Commonwealth. The enterprise continued for some time further, but it lost its reputation after more extensive and better equipped factories were built at Pawtucket, Providence, Waltham and, finally, at Lowell.

Reference should be made in passing to the successful efforts of Samuel Slater, who came in November, 1789, from one of Arkwright's mills in England, to establish factories in Rhode Island. This industrial pioneer, whose descendants still control properties which he started, arrived without working drawings of the machines which he desired to reproduce in America. With the help of a good memory and knowledge of mathematics he was able to construct machinery which served its purpose reasonably well. Beginning his operations at Pawtucket in December, 1790, he soon after opened the first American cotton yarn mill at New Providence. The progress of the business for many years was discouragingly slow. In January, 1807, there were but 4,000 spindles in operation in Rhode Island. These furnished yarns for hand-weaving at home. The country still imported nearly all its cotton cloth from England and the East Indies, the receipts from Calcutta alone amounting in 1807-08 to about 53,000,000 yards. The cost of spinning Slater's yarn is said to have been about double that of the whole processes of spinning, weaving and finishing in the Lowell mills of a generation later.

Most of these enterprises of Southern New England were prostrated during the War of 1812. They came to life again in the revival of business after the war.

Throughout this time the factory system, even in the cotton manufacture, hardly existed as it is now known. Weaving was still done mostly by hand, for the Cartwright loom, though invented in 1785, was jealously guarded by the English. It did not become available for American use until nearly a generation later. Such as it was, furthermore, the primitive Cartwright invention required many years of successive improvements to become the smooth running, efficient machine of modern manufacture. In the first looms the warp was perpendicular, the reed fell with a force of at least fifty pounds and the springs which threw the shuttle were, as Alfred Gilman puts it, "strong enough to have thrown a congreve rocket, and it required the power of two strong men to operate it very slowly for a very short time."

Francis Cabot Lowell and His Power Loom—Francis Cabot Lowell, who studied the conditions of manufacture in England in the years 1810 and 1811, who took the initiative in devising and financing a practical power loom for American use, who interested himself in the social as well as the commercial effects of the factory system, is, by general admission, the originator of the American cotton manufacture. His family name is perpetuated in the city which, as an outcome of his pioneer enterprise at Waltham, grew up on the site of the ancient Indian metropolis of the Merrimack.

Just before the city of Lowell celebrates the centenary, the one hundred and fiftieth anniversary of this representative of a famous family, its patron saint, will demand commemoration.

The father of the American factory system was the fourth child of Judge John and Sarah Higginson Lowell, of Newburyport, where he was born in 1775. The family, descended from Percival Lowell, is one which has had a long succession of distinguished members from the earliest days of the Massachusetts Bay colony to the present time. Judge Lowell was a leading man of his community, a member of the Provincial Assembly of 1776 and of the Constitutional Convention of 1780. Francis Cabot Lowell was graduated from Harvard College in 1793. As a young man he undertook mercantile business in which he was remarkably successful. His visit to England, made just before the War of 1812, was on account of his health which was already failing. In 1811 he was in Edinburgh, with his family, according to the reminiscences of Nathan Appleton, and thence he wrote to his friends of having become interested in cotton manufacturing and of his determination to visit Manchester before his return to America.

Lowell came back in 1813 at a time when such industries as the United States possessed were flat on account of the war with England. His active mind saw the importance of the economic independence of the country. The practical undertaking upon which he now entered is best described in Nathan Appleton's words: "He and Mr. Patrick

T. Jackson came to us one day on the Boston Exchange and stated that they had determined to establish a cotton manufacturing company, that they had purchased a water power in Waltham (Bemis's paper mill), and that they had obtained an act of incorporation, and Mr. Jackson had agreed to give up all other business and take the management of the concern."

The authorized capital of this new manufacture at Waltham was \$400,000, but only \$100,000 was to be raised until the company was assuredly successful. The original promoters themselves subscribed most of the capital. Mr. Appleton took \$5,000.

Lowell, as might be surmised from general knowledge of human nature, did not enter upon this scheme with the unanimous support of his family connections and friends. Henry Lee, in an article in the "Boston Daily Advertiser," in 1830, recalled that "many of his nearest connections used all their influence to dissuade him from the pursuit of what they deemed a visionary and dangerous scheme. They, too, were among those who knew, or thought they knew, the full strength of his mind, the accuracy of his calm calculations, his industry, patience and perseverance, and, withal, his power and influence over others, which was essential to his success; they still thought him mad, and did not recover from that error till they themselves had lost their own senses, of which they evinced symptoms at least, by shortly purchasing into the business of this visionary schemer at thirty, forty, fifty and even sixty per cent. advance."

Much of the subsequent prosperity of Francis Cabot Lowell's first attempt to introduce modern manufacturing in this country was undoubtedly due to his good fortune securing the services of a mechanical genius in the person of Paul Moody, whose name is perpetuated in one of the principal streets of Lowell. This inventor was born at Newbury, May 23, 1779, in the sixth generation from the saddler, William Moody, of Ipswich, England, who settled in 1634 at the Massachusetts Ipswich, and a year later moved into what is now Newbury. Paul Moody was one of seven sons of Captain Paul Moody. His academic education was limited. When sixteen years old he learned the weaver's craft, at which he became expert. He presently went into business with Jacob Perkins, of Amesbury, who had invented a nail-cutting machine. In 1812 he was in the employ of Kendrick and Worthen, manufacturers of carding machinery. Later, with Ezra Worthen, Thomas Boardman and Samuel Wigglesworth, he began to make satinets, a popular mixture of wool and cotton, their firm being incorporated, February 16, 1813, as the Amesbury Wool and Cotton Manufacturing Company, capitalized at \$46,000. Finally in 1814 Mr. Moody went to Waltham to superintend the setting-up of the machinery of the new mill planned by Messrs. Lowell and Jackson. Here he

found plenty of exercise for his inventive and organizing talent. One of his less known discoveries was that of the economical value of leather belting, afterwards in almost general use in mill drive.

The power loom with which Francis Cabot Lowell hoped to revolutionize American textile manufacture was not the Cartwright loom which was already in operation in Lancashire. It was one on which he himself had worked experimentally in a store on Broad street, Boston, employing a couple of men to turn a crank and thus furnish the power. By the time the building at Waltham was complete the first loom was ready for installation. "I well recollect," writes Appleton, "the state of admiration and satisfaction with which we sat by the hour, watching the beautiful movements of this new and wonderful machine, destined, as it evidently was, to change the character of all textile industry. This was in the autumn of 1814." Lowell appears from this account to have been a mechanic of no mean order. At Waltham, nevertheless, Paul Moody's services were required to invent an important movement to which the loom owed its complete success.

Other essential innovations for which Moody was responsible during the years he spent at Waltham are described with considerable precision by Rev. H. A. Miles in his "Lowell As It is:"

He invented the "dead spindle," which was introduced at Waltham and is still used throughout the mills at Lowell. The Rhode Island machinery employed the "live spindle," copied from the English. The product of the former is greater, though it requires more power. About the time of starting their mill at Waltham, Mr. Lowell and Mr. Moody went to Taunton, Mass., to procure a machine for winding the filling upon a bobbin. Just as the former gentlemen were concluding a contract for these machines Mr. Moody suggested that if they would return to Waltham without them, he thought he could invent a machine to spin the yarn upon the bobbin the same conical form in which the winder put it on, and thus supersede the necessity of the intervention of that machine. Upon their return he invented what is called the "filling frame," a machine which he at once perfected, and which is still used both at Waltham and at Lowell. Near the same time Mr. Lowell told Mr. Moody that they must have a "governor," to regulate the speed of their wheels. This was an apparatus of which Mr. Moody had never heard, and the only information concerning it which his friends could supply was that, having seen one in England, he remembered there were two iron balls suspended on two rods, connected at one end like a pair of tongs. When the wheels were in too rapid motion these balls were driven apart, and produced a partial closing of the water gate; when on the other hand, their motion was slow, the balls approached each other and effected a greater opening of the gate, by which an increased motion was obtained. This conversation was held in Boston, at Mr. Lowell's house. The gentlemen separated with an understanding that the "governor" should forthwith be ordered from England. Mr. Moody, on his ride to Waltham, could not get those balls out of his mind. They were flying around in his brain the whole

of that day and night. The next day he went to the shop and chalked out the plan of some wheels which he ordered made. Not long after this Mr. Lowell was at Waltham, and Mr. Moody inquired if the "governor" had been ordered from England. On learning that it had not Mr. Moody produced the "governor" which he had made. It was set up in the mill, and that identical one was in successful use until 1832. The "governors" now used in this city are all copied from that. Mr. Moody, with the assistance of Mr. Lowell, was the inventor of the "double speeder." This machine was set in operation at Waltham and was patented. Some time after this the patent right was infringed upon by some mechanics who had worked upon the machine at Waltham, and prosecution ensued. The case was tried before Judge Story and was argued by Mr. Webster. The late Mr. Bowditch, then of Salem, was requested to examine the principles, both of the original and the imitated machines, in order to appear as a witness at the trial. Mr. Bowditch was afterwards heard to say that seldom had his mind been more severely taxed, for the "double speeder" required for its construction the greatest mathematical power of any piece of mechanism with which he had become acquainted. The idea of this machine originated with Mr. Moody, but the mathematical calculations necessary for its construction were made by Mr. Lowell.

The Lowell power loom was not without a competitor almost from the outset. Closely following upon its appearance came the importation of the Horrocks loom at Pawtucket, Rhode Island, in 1817. The latter was of English devising, on the basis of patents taken out in 1803, 1805 and 1813. Though inferior to the Lowell machine in having a crank instead of a cam to lift the harness, it otherwise was simple and efficient and could be built for about \$70 as opposed to \$300, the cost of the loom controlled by the Boston Manufacturing Company.

The system of company boarding houses and other provisions for the welfare of operatives which Mr. Lowell and his associates introduced at Waltham had few, if any, counterparts in the old world. The germination of this principle of looking out for the human units of production, as well as for the machines, appeared a little later in the initial scheme of the city of Lowell.

The attitude of responsibility for the condition of employees which prevailed from the outset of the experiment at East Chelmsford thus dated from the philanthropic mind of Francis Cabot Lowell, who "had another idea in his mind which was one of the greatest importance, and that was the moral and religious instruction of the operatives." Rev. George Kengott, in "The Record of a City," follows the tradition that Lowell and his friends were much influenced by the humanitarian philosophy of Robert Owen. Be that as it may, the Boston Manufacturing Company as early as 1814 built model boarding houses and presently undertook schools, a church, and the "Rumford Institute of Mutual Instruction," and when the question of estab-

lishment of mills at Lowell was under consideration, according to Mr. Appleton, "the question arose and was deeply considered whether this degradation [of the type familiar in English factory towns] was the result of the peculiar occupation or other distinct causes." As Rodney Hemenway expresses it, in his "Genesis of the Social System in New England Manufacturing," the Boston promoters deliberately "chose the example of that wise, philanthropic manufacturer-reformer, Robert Owen, rather than that of the average factory manager with whom they came into contact during their studies of the manufacturing question."

Even a sketchy record of Francis Cabot Lowell's achievements would be incomplete without reference to his pioneership protectionism.

One of the chief results of American distresses during the War of 1812 was that shortly after it the Nation committed itself to a policy of subsidizing home industries through protective tariffs. Whereas, England, under the influence of the philosophical anarchism of Adam Smith and Jeremy Bentham, had already evolved a theory of free trade, the United States definitely adopted the plan of protecting the Nation's capitalists and laborers from the effects of world-wide competition. Without this legislative encouragement, it hardly need be said, the use of the water powers of the Merrimack for manufacturing purposes would probably have been delayed for years, or even generations, and it is interesting to note that Francis Cabot Lowell led the fight for recognition of the protective principle which was due shortly to make possible the upbuilding of the city that now bears his name.

In the winter of 1816 Lowell was in Washington and there, as Edward Everett relates in his memoirs:

In confidential intercourse with some of the leading men of Congress, he fixed their attention on the importance, the prospects and the dangers of the cotton manufacture, and the policy of shielding it from foreign competition by legislative jurisdiction. Constitutional objections at that time were unheard of. The Middle States, under the lead of Pennsylvania, were strong in the interest of manufacturing. The West was about equally divided. The New England States, attached from the settlement of the country to commercial and navigating pursuits, were less disposed to embark in a new policy which was thought adverse to some branches of foreign trade, and particularly to the trade with India, from which the supply of coarse cottons was principally derived. The planting States, and eminently South Carolina, then represented by several gentlemen of distinguished ability, held the balance between the rival interests. To the planting interest it was demonstrated by Mr. Lowell that by the establishment of the cotton manufacture in the United States the southern planter would greatly increase his market. He would furnish the raw material for all those American fabrics which should take the place of manufactures imported from India or partly made in England from

India cotton. He would thus, out of his own produce, be enabled to pay for all the supplies which he required from the North. This simple and conclusive view of the subject prevailed, and determined a portion of the South to throw its weight in favor of a protective tariff. The minimum duty on cotton fabrics, the corner stone of the system, was proposed by Mr. Lowell, and is believed to have been an original conception on his part. It was recommended by Mr. Lowndes, it was advocated by Mr. Calhoun, and was incorporated into the law of 1816. To this provision of law, the fruit of the intelligence and influence of Mr. Lowell, New England owes that branch of industry, which has made amends for the diminution of her foreign trade; which has kept her prosperous under the exhausting drain of her population to the West; which has brought a market for his agricultural products to the farmer's door; and which, while it has conferred these blessings on this part of the country, has been productive of good, and nothing but good to every other portion of it. For these public benefits—than which none, not directly connected with the establishment of our liberties, are of a higher order or of a more comprehensive scope—the people of the United States are indebted to Mr. Francis Cabot Lowell; and in conferring his name upon the noble city of the arts in our neighborhood a monument not less appropriate than honorable has been reared in his memory. What memorial of a great public benefactor so becoming as the bestowal of his name on a prosperous community which has started, as it were, from the soil at the touch of his wand? Pyramids and mausoleums may crumble to earth, and brass and marble mingle with the dust they cover, but the pure and well deserved renown, which is thus incorporated with the busy life of an intelligent people, will be remembered till the long lapse of ages and the vicissitudes of fortune shall reduce all of America to oblivion and decay.

Francis Cabot Lowell did not live to see the fruition of the enterprises for which his sagacity and persistence were mainly responsible. He died at the early age of forty-one. He had, of course, no direct connection with the community which later adopted his name at the instance of its benevolent despot, Kirk Boott. It is not known that he ever saw the water powers of the Merrimack and Concord at East Chelmsford.

Of his business acumen, which placed the cotton industry for the first time on a firm basis, his friend, Nathan Appleton, relates:

It is remarkable how few changes, in this respect [of installing machinery and routing processes through the mill] have been made since those established by him in the first mill built in Waltham. It is also remarkable how accurate were his calculations as to the expense at which goods could be made. He used to say that the only circumstance which made him distrust his calculations was that he could bring them to no other result but one which was too favorable to be credible. His calculations, however, did not lead him so far as to make him imagine that the same goods which were then selling at thirty cents a yard would at any time be sold at six cents, and without a loss to the manufacturer, as has since been done. He died in 1817, beloved

and respected by all who knew him. He is entitled to the credit of having introduced the new system in the cotton manufacture under which it has grown up so rapidly; for, although Messrs. Jackson and Moody were men of unsurpassed energy and talent in their way, it was Mr. Lowell who was the informing soul which gave direction and form to the whole proceeding.

The New Life at Old Wamesit—In 1820 and immediately thereafter the communities at Pawtucket and Massic Falls were jogging on in the old ways which have been described. At Pawtucket Bridge, Elisha Ford (1778-1855), son of Captain John Ford, surveyor and hydraulic engineer, represented the contemporary interest in water power. Over at Chelmsford Centre the Rev. Wilkes Allen had just brought out, through a town appropriation for that purpose, "the first book of town history issued in America." Middlesex Village, as has been seen, was an active hamlet, through business due to the Middlesex canal, and through the glass works. The substantial families then living between Middlesex and the Chelmsford bridgehead at the falls pursued their handicrafts and agricultural vocations, and many of them attended divine worship on the north side of the Merrimack. Between Clark's Ferry and the Navy Yard, Dracut looked much as it now would, if the mid-century and later constructions could be removed and only the fine old white houses, some of which happily survive, were left to maintain their dignity among the elms. The Hildreth bailiwick about the Great Bunt still had its annual excitement when the shad and alewives ran. The yellow meeting house at Dracut Centre, the object of many controversies, was now an established institution. In East Dracut, Joseph Bradley Varnum, the greatest man of this part of Massachusetts, had just passed away, in September, 1821, from angina pectoris, having shortly before his death dictated to his niece, Miss Harriett Swett Varnum, the autobiography which has been frequently quoted in this history. In the downtown district of the future city the family of Tylers was conspicuous, Nathan Tyler owning nearly all the land from the old Pawtucket or Navigation Canal, to the Merrimack and as far down as the mouth of the Concord near which the Tyler mansion stood. Over the Concord was the Gedney mansion, the old yellow house, already described. Like the Hildreths, the Tylers took great interest in the fisheries. Some reminiscences of the late Captain Silas Tyler give a vivid picture of the customs of the time: "The best haul of fish I ever knew was eleven hundred shad and eight or ten thousand alewives. This was in the Concord just below the Middlesex Mills. My uncle, Joe Tyler, once got so many alewives that he did not know what to do with them. The law allowed us to fish two days in the week in the Concord and three in the Merrimack. * * * The Dracut folks fished in the pond at

the foot of Pawtucket Falls. They would set their nets there on forbidden days. On one occasion the fish wards from Billerica came and carried off their nets. The wardens, when they returned to Billerica, spread the nets in the grass to dry. The next night the fishermen, in a wagon with a span of horses, drove to Billerica, gathered up the nets, brought them back and reset them in the pond. People would come fifteen or twenty miles to procure these fish. Shad were worth five dollars per hundred and salmon ten cents per pound." The neighborhood was one whose simple farmer people, fairly prosperous, lived the kind of life their ancestors had prescribed for them, with much hard work, and much merriment and gayety.

In the autumn of 1821 Thomas M. Clark, merchant of Newburyport and a director of the Pawtucket Canal, through which logs were rafted down to the head of Hunt's Falls, came to East Chelmsford and began to negotiate for some of the farm lands whose titles had come down from the original Wamesit Neck proprietorship.

He began by buying the Nathan Tyler farm. This tract included about forty acres, covering the territory between Merrimack street on the north, the lower end of Pawtucket canal on the south, the present Merrimack canal on the west and coming across Merrimack street near the present Merrimack square and extending to the junction of the rivers. For this property eight thousand dollars were paid. Between Merrimack street and the river was the sixty-acre farm of Josiah Fletcher, which sold for the same price. Above the Fletcher property was the Cheever farm, the homestead of which long stood just above the Lawrence corporation. Here were one hundred and ten acres, nine undivided tenths of which Mr. Clark secured for \$1,800, with an option on the remaining one-tenth for two hundred dollars. "The owner of the other tenth," says Miles, "had agreed to convey it for two hundred dollars; but dying insolvent, it was sold by order of the court, the Locks and Canals Company giving, for seven and a half tenths thereof, upwards of three thousand dollars. The remaining two and a half tenths were bought a year afterwards for nearly five thousand dollars—so rapidly did the value of the land rise. In 1822 the farm of the widow of Joseph Warren was purchased, a tract of about thirty acres, lying between Central street and Concord river, with the Pawtucket canal on the north, and extending up nearly as far as Richmond's Mills on the south. For this the sum of five thousand dollars was paid. Within these boundaries Mr. Thomas Hurd owned two or three acres of land in the near neighborhood of his woolen mill, which was situated where the Mechanics' Mills now stand. The farm of Mr. Joseph Fletcher, the homestead of which still stands on the high land in the rear of the upper part of Appleton street, came down to the Pawtucket canal on the north and Central street on the east, and con-

tained about one hundred acres. This was not purchased until 1824, for which the sum of ten thousand dollars was paid."

These purchases of the ancient farmsteads of Wamesit Neck had not gone far before the neighborhood began to suspect that Mr. Clark, of Newburyport, must represent clients more influential and ambitious than the proprietors of the transportation canal which annually enabled a few million feet of pine lumber from up country to circumvent the tortuous channel of Pawtucket Falls. What was really happening soon became evident to their astonished eyes.

The prosperity of the Waltham cotton manufacture led to a search which in the early twenties induced several Boston capitalists to consider where next they might plant a factory town. The horse power developed by the Charles river is small, and there is no other stream in the immediate neighborhood of Boston that could be used for a large installation. Hence the manufacturing interests already must look further afield.

The narrative of the quest for a dependable supply of power cannot be told better than by following Mr. Appleton's narrative:

The success of the Waltham company made me desirous of extending my interest in the same direction. I was of opinion that the time had arrived when the manufacture and printing of calicoes might be successfully introduced in this country. In this opinion Mr. Jackson coincided; and we set about discovering a water power. At the suggestion of Mr. Charles H. Atherton, of Amherst, New Hampshire, we met him at a fall of the Souhegan river about six miles from its entrance into the Merrimack, but the power was insufficient for our purpose. This was in the summer of 1821. In returning we passed the Nashua river without being aware of the existence of the fall which has since been made the source of so much power by the Nashua company. We saw a small grist mill standing in the meadow near the road, with a dam of some six or seven feet. Soon after our return I was at Waltham one day, when I was informed that Mr. Moody had lately been at Salisbury, where Mr. Worthen, his old partner, said to him: "I hear Messrs. Jackson and Appleton are looking out for water power; why don't they buy up the Pawtucket canal? That would give them the whole power of the Merrimack, with a fall of thirty feet." On the strength of this, Mr. Moody had returned that way, and was satisfied with the extent of the power, and that Mr. Jackson was making inquiries on the subject. Mr. Jackson soon after called on me, and informed me that he had had a correspondence with Mr. Clark, of Newburyport, the Agent of the Pawtucket Company, and had ascertained that the stock of that company, and the lands necessary for using the water power, could be purchased; and asked me what I thought of taking hold of it. He stated that his engagements at Waltham would not permit him to take the management of a new concern; but he mentioned Mr. Kirk Boott as having expressed a wish to take the management of an active manufacturing establishment, and he had confidence in his possessing the proper talent for it. After a discussion

it was agreed that he should consult Mr. Boott; and that, if he should join us, we would go on with it. He went at once to see Mr. Boott, and soon returned to inform me that Mr. Boott entered heartily into the project; and we set about making the purchases without delay. Until these were made it was necessary to confine all knowledge of the project to our own three bosoms. Mr. Clark was employed to purchase the necessary lands, and such shares in the canal as were within his reach; whilst Mr. Henry Andrews was employed in purchasing up the shares owned in Boston. I recollect the first interview with Mr. Clark, at which he exhibited a rough sketch of the canal and adjoining lands, with the price which he had ascertained they could be purchased for; and he was directed to go on and complete the purchases, taking the deeds in his own name, in order to prevent the project taking wind prematurely. The purchases were made accordingly for our equal joint account; each of us furnishing funds as required to Mr. Boott, who kept the accounts. Formal articles of association were drawn up. They bear date December 1, 1821; and are recorded in the records of the Merrimack Manufacturing Company, of which they form the germ. The six hundred shares were thus described:

Kirk Boott and J. W. Boott.....	180
N. Appleton	180
P. T. Jackson	180
Paul Moody	60

The Act of Incorporation of the Merrimack Manufacturing Company bears date 5th of February, 1822, recognizing the original association as the basis of the company. Our first visit to the spot was in the month of November, 1821, when a slight snow covered the ground. The party consisted of P. T. Jackson, Warren Dutton, Paul Moody, John W. Boott and myself. We perambulated the grounds and one of us remarked that we might live to see twenty thousand people in the place. ✓

Such was the beginning of the scheme for a mill village at East Chelmsford. The original purchases on account of the town which it was planned to lay out totaled about four hundred acres. The average price paid was about one hundred dollars an acre. That the negotiations caused much surprise in the neighborhood, and much wonderment as to what was about to happen, may be conjectured.

Speculation in land for the purpose of selling out was soon rife, as Mr. Appleton had expected. Thomas Hurd, the manufacturer of satinets on the Concord river, after whom Hurd street was named, is described by Alfred Gilman as a "shrewd operator," who happening to be in Boston and to overhear a conversation regarding purchase of lands at East Chelmsford, hurried home and secured the refusal of the Bowers saw mill, near Pawtucket bridge, and of considerable land in their neighborhood. The records of the Merrimack company support this story, for they show that on July 29, 1822, the directors received a proposal from Mr. Hurd in reference to a sale of land at the fall, which proposal was referred to a committee. On August 17,

1822, the Hurd holdings were bought by the company. In other transactions of the times, Mr. Hurd appears in the light of a business man with talent for making himself obnoxious for a financial purpose.

Lowell, it should be observed in passing, might have been founded on the Kennebec instead of the Merrimack, had one of the Maine property owners proved as accommodating as the farmer folk about Pawtucket Falls were found out to be. It appears to be well authenticated that during the period of negotiations Kirk Boott made a trip from Boston to Gardiner, Maine, to bargain with R. H. Gardiner, of that place, concerning the water-power privilege belonging to his family's estate. The owner was quite willing to conclude a long lease, but not to sell his land and power. Hence Boott returned to Boston, *rebus infectis*.

The Founders of the City—The group of Boston capitalists who became the founders of a city which still honors their memories contained several quite notable personalities.

Foremost among them was Francis Cabot Lowell's brother-in-law, Patrick Tracy Jackson, who after Mr. Lowell's death was the final authority in all financial arrangements. A descendant of Jonathan Jackson, an Irish merchant who settled in Newburyport, he had a business training in the East India trade, which helped to develop imagination and a spirit of enterprise in so many American youths of the early nineteenth century. His subsequent interest in the creation of New England railroads will appear in this narrative.

Nathan Appleton, who frequently came forward as literary spokesman, as well as financial factor of the early manufacturing enterprises, was of the celebrated family that came from Captain Samuel Appleton, of Ipswich, commander of the Massachusetts troops in King Philip's War. He began a college course at Dartmouth College, which he did not finish, as he had an opportunity to enter business with his brother, Samuel Appleton, of Boston. He became one of the heaviest investors in Lowell mill properties. He was a member of the Massachusetts Legislature between 1815 and 1827 and a member of Congress in 1830. His personal characteristics have thus been described by his friend, Robert C. Winthrop: "Persistent courage and inflexible integrity were indeed the two leading characteristics of Mr. Appleton's character, and constituted the secrets of his good success. To these, more than to anything else, he owed his fortune and his fame. He displayed his boldness by embarking in untried enterprises, by advocating unpopular doctrines, by resisting popular prejudices, by confronting the most powerful and accomplished opponents in oral and written arguments, and by shrinking from no controversy into which the independent expression of his opinions might lead him. His integrity was manifested where all the world might read it, in the daily doings of a

long mercantile career, and in the principles which he inculcated in so many forms of moral, commercial and financial discussion." A rather less favorable opinion of his judgment and business acumen, especially in his latter years, was expressed by Dr. J. C. Ayer, of Lowell, who "muckraked" the Boston managements of Lowell mills just before the Civil War.

The position of town manager, to use a term that has lately come into currency, was deputed by the capitalists who planned to create this mill city at East Chelmsford to Kirk Boott, who had expressed himself as desirous of undertaking work of this kind. To this choice, fortunate, no doubt, in the main, Lowell owes many of its distinguishing peculiarities even to this day.

The young manager who was given his tryout during the exacting first years of the town was a positive character and left his impress in many directions. He was born in Boston in 1791, but as a young boy was sent to England, where he was trained at the celebrated Rugby school. He presently returned to America and entered Harvard College, from which, however, he was not graduated. His father secured for him a commission in the British army and he entered that service in which he made a distinguished record. As a lieutenant in the Duke of York's Regiment, he witnessed the capture of San Sebastian, the battles of Nieve and the Nivelle, the passage of the Garonne and the siege of Bayonne. He probably would have risen to high rank in the royal army, but for the intervention of the War of 1812, in the course of which his regiment was ordered to America.

Unwilling to fight against his fellow countrymen, young Boott resigned his British commission after five years' service. In 1817 he returned to Boston to engage in business with his brothers. Their enterprise proved unsuccessful, and at the time of the negotiations for the Pawtucket Canal and the adjacent lands, Kirk Boott, as it happened, was out of employment. At this juncture he gladly accepted the tender made by Patrick Tracy Jackson to become superintendent of the new mills at East Chelmsford. To his personality, and especially to his English education and ideas, were due many of the characteristics of the town of which he was at the outset the virtual dictator, or "benevolent despot."

Whether more credit than was his due has been given to Kirk Boott for his share in projecting Lowell is a fair subject for argument. His commanding personality to the generation immediately following made him seem to have been the major initiator of the enterprise. Toward a more moderate estimate of the part taken by the first agent of the Merrimack company, Alfred Gilman, in his sketch of the history of Lowell published in 1880, quotes John A. Lowell, of Boston, as writing: "I should be the last person to say one word in depreciation

of Kirk Boott. He was my bosom friend, and I was his trustee. I would not say anything to detract from his credit; but it is no more true as a matter of fact that he made the first experiment in joint stock companies in carrying on the cotton manufacturing than it is true that he went out with a fishing line and found that there was a water power at Chelmsford. The first person who suggested the place was Ezra Worthen. Paul Moody knew nothing about it. Mr. Moody and Mr. Jackson came up afterwards and saw the place. It is not true that Mr. Boott was the first to suggest it. So far from it, the whole purchase was made of the Pawtucket Canal, and of most of the farms here, before Mr. Boott ever had set foot on the spot." After the enterprise was under way, however, Kirk Boott was unquestionably for some years the principal person in the management of affairs, down to the time of his untimely death from heart failure in Merrimack street, Lowell.

A likable man Kirk Boott hardly was, and various stories are told that illustrate his personal unpopularity with the populace of the community which he came to direct. His riding whip at very slight provocation fell upon the backs of boys whom he deemed impudent. His anglomania made trouble for him. One Fourth of July, for example, he raised both the English and the American flag on the flagpole at his residence, with the former emblem on top. An indignant crowd gathered and demanded that he reverse the order of the flags. This Boott refused to do, whereupon the citizens swarmed into his yard and did it for him.

Kirk Boott's negotiations with landowners of the neighborhood were regarded, whether rightly or wrongly, as rather ungenerous. A ditty is recalled of which the following were characteristic stanzas:

There came a young man from the old countree,
The Merrimack River he happened to see.
What a capital place for mills, quoth he,
Ri-toot, ri-noot, ri-toot, riumpy, ri-tooten-a.

And then these farmers so cute,
They gave all their lands and timber to Boott,
Ri-toot, ri-noot, etc.

Under the auspices that have been noted the Merrimack Manufacturing Company was duly incorporated under the laws of Massachusetts in 1822 with a capital stock of \$600,000, and a train of events was started which almost overnight altered the characteristics of old Wamesit Neck. From this foundation dates the factory town as now known, a community in which thousands of workers are summoned daily at the same hour into workshops where each performs his task in a scheme of subdivided labor.

The rural countryside in Chelmsford, Dracut and Tewksbury, remained, of course, for a time, much as before; only, indeed, with the

advent of the trolley and motor car in very recent years here the several nearby "centres" became radically different from the villages which sent forth their minute-men to the Concord fight. The "city of the dinner pail," however, which was inaugurated at East Chelmsford, was distinctly a departure in American municipalities.

The plans of the Boston entrepreneurs, it may be emphasized, were for a much more humane and decent industrial community than any of those gathering places of the exploited classes with which the landscape of nineteenth century England had already been fouled. As a man thinks so will he do. The New England capitalists, whatever their outlook on life, had to a far less extent than the contemporary Englishmen of business fallen under the spell of a "political economy which posited man as a naturally lazy and selfish animal who must be forced to work under the spur of grim necessity and whose ethical and altruistic sentiments, aspirations and instincts were to be ignored as negligible factors, while his greeds and dreads were constantly to be played upon, in the interest of large profits for his employer." The laissez-faire theory, in point of fact, was far more prevalent in England than in America. In the former country, to quote again from Lincoln's article on "The Factory System" in "The American Business Encyclopædia," "the manufacturer took no responsibility, as a rule, for the housing of the workers allured from the country to the town by the prospect of steady work. How the masses lived and where they were buried, worn out at forty, was their own account."

In contradistinction to the picture of human misery serving as a background for the profits of Lancashire manufacturers, Messrs. Jackson, Appleton and their associates appear from the first to have had a vision of the city of neat well-clad, self-respecting operatives, reported by visitors to Lowell prior to the War of the Rebellion. It is possible, of course, somewhat to sentimentalize the favorable conditions of living in New England factory towns, of which Lowell was the prototype. Some of the plans that were adopted for the welfare of the workers left little or no provision for human nature; and those subsequently went into the discard. "Corporation paternalism," writes Oneal in considering the status of the working class during this period, "became rampant. The girls not only slept in company houses, but patronized company stores. Some corporations maintained churches, paid the preacher's salary, collected pew rents from the operatives, and held out fixed sums from their wages for the welfare of their souls. Six and eight girls frequently occupied the same bed chamber, and the hours of labor varied from twelve hours in summer to fourteen hours in winter."

Whatever the defects, nevertheless, of the specific plans, it remains true that Lowell, especially in its first years, was an exemplar

of the principles of "welfare work" which are now generally applied in American industry. That some of the arrangements adopted were crude may be conceded. The same criticism, indeed, still lies against many more modern efforts of the same sort. It stands at least to the credit of the men who founded Lowell that they took into their consideration the proper upkeep of men as well as machines; that they did not purpose to permit the sons and daughters of the farms who came trooping to their new town in search of work to feel that the employer had no interest whatever in them outside of working hours. It is beginning to be understood that the world movement toward industrial democracy, the universal class struggle which has been increasingly apparent since the factory system came into being, cannot be completely forefended by palliatives; yet it is tolerably obvious that the relative freedom which Lowell has enjoyed from sanguinary clashes of interest between the representatives of capital and of labor may have been due, in large measure, to a disposition among the employers, evident from the first, to create opportunities by which the strong and ambitious worker might readily improve his condition in life.

The inauguration of this wise policy of regarding the human equation, the late Governor Frederic T. Greenhalge attributed, in his address at the Lowell commemorative exercises of April 1, 1886, to the founder of the initial experiment at Waltham. "If it was wise to stock a factory with the best inanimate machinery," he said, "Francis Cabot Lowell thought it wise to obtain the best human machinery, too. The welfare of the operative, mental, moral and physical, was as important in any wise man's scheme of a factory as the ten thousand horse power of the river. The factory system, as then established, in this country and in England, was execrable. This was twenty years before Shaftesbury had led public opinion to the coal pit and the factory and showed how stunted and deformed, how feeble and helpless, how ignorant and depraved, men, women and children had become under the cruel system followed by selfish employers. The factory system was looked upon as accursed, and, if the daughters of New England were to run the looms in the new enterprise, a very different system must be adopted.

✓ "And so," continued Mr. Greenhalge, "the great plan was formulated; the neat, well-kept boarding house, with pleasant, home-like habits and restrictions, was established; the church, the library and the lecture room followed; and religion, culture and refinement lent their influences to the life of toil. A new doctrine was proclaimed; the welfare of the employed was a necessary factor to the success of the employer, just as the welfare of the employer was necessary to the success of the employed. They were one in interest, one in the loss and one in the gain; one in prosperity and in adversity. Milton tells

us of a music so divine that it would create a soul under the ribs of death. Lowell discovered a principle that created a soul under the ribs of political economy."

Excavation of Canals and Erection of Factories—Following the purchase of lands at East Chelmsford, and the incorporation of the Merrimack company, as related, in the spring of 1822 a force of five hundred laborers was gathered to effect an enlargement of Pawtucket canal. Somewhat more than a year was required for this work, which cost about \$120,000. When completed the canal was sixty feet wide and capable of carrying eight feet of water throughout. Simultaneously a lateral canal, the present Merrimack canal, was dug from the Pawtucket canal northward to the Merrimack river. This latter channel furnished power for the Merrimack company's original installation.

To Ezra Worthen, of Amesbury, who had first made the suggestion that the Boston capitalists should consider the water powers at Pawtucket Falls, was entrusted the superintendency of the construction work of the Merrimack company's first mill, which went on *pari passu* with the digging of the canals. This young man, whose name is perpetuated in Worthen street, was a descendant of Ezekiel Worthen, who became one of the proprietors of the town of Amesbury in 1666. He was born at the ancestral home February 11, 1781. After learning the trade of ship carpentry he turned his attention to textile manufacture. For a time he made carding machines for a firm in Amesbury. In 1812 he formed partnership with Paul Moody and others for making woolen goods. In 1813 this enterprise was incorporated under the name of the Amesbury Wool and Cotton Company, with which Mr. Worthen was connected until he came to East Chelmsford in 1822. He witnessed the solid, substantial factory completed and the first return of cloth made in November, 1823. Like many others of his generation, he was a bad risk, from the viewpoint of the modern life insurance expert. "He barely lived long enough to see a great promise in his fruitful idea. He died June 18, 1824. A man of much manufacturing experience, and of great mechanical talent, his loss in the infancy of the enterprise was deeply felt."

Previous experience with manufacturing on the Concord river seems to have helped in this first undertaking on a large scale to use the heretofore unharnessed power of the Merrimack. In the construction of the Merrimack canal it is believed that the engineers were greatly influenced by a smaller but generally similar hydraulic arrangement which Oliver Whipple, the powder manufacturer, had just put into successful operation on the Concord river. While engaged in manufacturing at this point, as already stated, Mr. Whipple saw the possibility of developing power that might be used by several mills. He accordingly constructed a canal from the head of

the rapids which ran nearly parallel with the river to the foot of the falls, thence taking a westerly course and discharging its water, after using, into Hale's brook. The rapids of the Concord have a total fall of about twenty-five feet, and the net result of Mr. Whipple's undertaking was to provide the mill sites that were later used by Faulkner's mill, for flannel manufacture; Chase's mill, which specialized on fancy woolens, the Charles A. Stott flannel mill, American boot company, Belvidere woolen company, the shuttle factory, American hunting company, Naylor's carpet company, a grist mill and a worsted mill. The Whipple canal is understood to have been the first of its kind in this country. Partners of the manufacturer were so skeptical about it that they insisted on consulting the eminent engineer, Colonel Loammi Baldwin, who at once pronounced the plans perfectly practicable. The work of constructing this canal began in September, 1821. Meader states that "it is not improbable, in fact it is known, that this small canal had a favorable influence on the men who, the following year, examined the Pawtucket Falls with a view to establishing the immense business which preëminently entitled Lowell to the distinctive name it bears—the City of Spindles."

During this digging of the Pawtucket canal an interesting geological fact came to light. It is now, apparently, the general belief of geologists that the Merrimack river at one time continued to flow southward, presumably into Boston harbor, instead of turning abruptly to the northeast as at present. Confirmation of this theory is afforded by a notice in the "Lowell Journal," March 10, 1826: "In digging this canal ledges were found considerably below the old canal which bore evident traces of its having once been the bed of the river. Many places were worn in the ledge, as there usually are in falls, by stones kept continually in motion."

The new factory of the Merrimack company was opened on time and the first piece of cotton cloth ever made in the modern way at Lowell was woven by Deborah Skinner, whom Paul Moody had brought from Waltham to instruct the new operatives in the care of the looms. Miss Skinner continued in the service of the Merrimack company for about five years, when she married Horace Barbour, an overseer. The family later removed to Lewiston, Maine, where Mrs. Barbour died in 1870. Some day, as the importance of the beginning is better appreciated than now, a sculptor or a mural painter may be commissioned to make a representation of Deborah Skinner at the loom.

The driving force in the town planning and construction work which from 1822 onward rapidly transformed East Chelmsford, resided, of course, in the person of Kirk Boott. The superintendent of the new factory had come to East Chelmsford to live, watching over

the erection of his own fine house on a knoll of the old Tyler place just north of Merrimack square, the house that later was moved to the head of Merrimack street to become the main building of the corporation hospital. Mr. Boott, from all accounts, was an indefatigable worker. He "gave his whole zeal and strength," says Miles, "to promote the prosperity of the new village and town. He watched its growth with a paternal interest, resolving here to live and die."

The Earliest Corporation Boarding Houses—The system of corporation boarding houses, which at this writing is still existent in the life of the city, though each decade finds the residential holdings of the corporations smaller, came in with the advent of the Merrimack manufacturing company.

It was foreseen that the new chances for employment would result in an influx of young people from the farms, and it was purposed to see that these should be at least as well housed as at home. According, in 1822-23, were constructed the first of the long blocks of brick boarding houses, each divided into six or eight tenements, which for years have been conspicuous on the side streets off Merrimack and Middlesex streets. "These tenements," wrote Miles in 1845, "are finished off in a style much above the common farm houses of the country, and more nearly resemble the abodes of respectable mechanics in rural villages. They are all furnished with an abundant supply of water, and with suitable yards and outbuildings. These are constantly kept clean, the buildings well painted, and the premises thoroughly whitewashed every spring at the Corporation's expense."

The typical boarding house of the early period, it may be added, placed the dining-room in front, making it easy for the operative to slip in for a meal, whether going to her room or not. The kitchen was situated in the rear. There was usually a special parlor for the boarding house keeper, customarily a widow. In some houses a sitting room was provided for the boarders. The rest of the building was given to the sleeping rooms. "In each of these," continues Miles, "are lodged two, four, and, in some cases, six boarders; and the room has an air of neatness and comfort exceeding what most of the occupants have been accustomed to in their paternal homes. In many cases these rooms are not sufficiently large for the number who occupy them; and sometimes that attention is not paid to their ventilation which a due regard to health demands."

It must be observed, in amplification of Mr. Miles' last point, that in point of hygiene and sanitation these boarding houses could not be expected to approach modern standards of the "model tenement." They were built, with all the best intentions in the world, at a time when infectious diseases were more rife than now and when the means

of preventing them were very little understood. They were, nevertheless, much better kept up under corporation management than the same houses are now maintained in most of the cases in which they have come into the hands of private owners.

Segregation of the sexes was undertaken from the outset. Miles prints the following:

Regulations to be observed by persons occupying the boarding-houses belonging to the Merrimack Manufacturing Company.

They must not board any persons not employed by the company, unless by special permission.

No disorderly or improper conduct must be allowed in the house.

The doors must be closed at 10 o'clock in the evening; and no person admitted after that time, unless a sufficient excuse is given.

Those who keep the house, when required, must give an account of the number, names and employment of their boarders; also with regard to their general conduct, and whether they are in the habit of attending public worship.

The buildings, both inside and out, must be kept clean and in good order. If the buildings or fences are injured, they will be repaired and charged to the occupant.

No one will be allowed to keep swine.

St. Anne's, Lowell's Oldest Downtown Church—The company's attempt to supervise the religion of its employees has come in for much reprobation in later times. It was not continued for long. It was certainly a mistaken policy. One must remember, nevertheless, that such supervision was not so impossible in 1822 as it would be in the cosmopolitan city of to-day.

The nearest place of worship to the factory, as has been shown, was the meeting house at Pawtucketville, at this period under Presbyterian control. The company's feeling that definite provision ought to be made for requiring all its operatives to attend worship led to the establishment in East Chelmsford of one of the first edifices in this part of Massachusetts of the Protestant Episcopal Church of America.

That St. Anne's Church was erected to follow the faith of the Anglican Church rather than of one of the denominations, or "dissents," to which practically all country people in New England in the first part of the nineteenth century gave adherence, was seemingly due to Kirk Boott's proselyting zeal, acquired during his English education and service in the British army. It happened that in 1821 the Unitarian controversy which split the historic Congregational body of New England into opposing factions was at its height. Most of the directors of the Merrimack company were Unitarians. On account, perhaps, of the bitterness which they feared



1. CHURCH OF THE IMMACULATE CONCEPTION (Roman Catholic).
2. ST. ANNE'S CHURCH (Episcopal).
3. GRACE UNIVERSALIST CHURCH.
4. FIRST BAPTIST CHURCH.

might be engendered if an effort were made to force their forms of worship and belief upon a population most of whom must come from communities in which the orthodox or trinitarian type of Congregationalism was still dominant, they appear to have listened with interest to a suggestion from Mr. Boott that a Protestant Episcopal Church be established. Nathan Appleton's narrative shows that in December, 1822, Messrs. Jackson and Boott were appointed a committee of the corporation to build a suitable church for the operatives. Later it was voted that the structure should be of stone at a cost not to exceed nine thousand dollars. In pursuance of this vote the cornerstone of St. Anne's Church was laid May 20, 1824.

The church society had previously been organized on February 24, 1824, as The Merrimack Religious Society. The first public services of this society were held on March 7, 1824, in the schoolhouse which the Merrimack company had built on Merrimack street, on land where the Green school now stands. The evening before these services an officiating clergyman had arrived in the person of the Rev. Theodore Edson.

Thus was started the oldest church society in downtown Lowell. It is hardly accurate, of course, in view of the priority of the West Congregational Church and Society of Dracut, founded in Pawtucketville in 1794, to assert, as does the author of the *Courier-Citizen's "Illustrated History of Lowell, Massachusetts,"* that St. Anne's was the first building that was dedicated to religious worship within the present limits of the City of Lowell.

The founding of St. Anne's Church brought to East Chelmsford one of the most famous churchmen of his day, the scholarly and beloved Rev. Theodore Edson, D. D., who was born at Bridgewater, August 24, 1793. Dr. Edson as a youth learned carpentry, but having intellectual tastes entered Phillips Academy, Andover, in 1816, and thence continued his education at Harvard College, from which he was graduated with honors. He assumed deacon's honors and became assistant at St. Matthew's Church, South Boston, from which he was invited to come to the newly erected St. Anne's. His distinguished services to the cause of popular education in Lowell and to many other good movements will be recorded in the narrative that follows.

The Incorporation of the Town of Lowell—The principles of political democracy, since the American Revolution, were so generally accepted that the manufacturing community at East Chelmsford could hardly have gone on for many years completely subject, both politically and economically, to the irresponsible if benevolent paternalism which the rule of Mr. Boott and his associates had ushered in. The natives of the region, as has appeared in preceding chapters, had

always been assertive. Practically all newcomers were of the same virile and independent Yankee stock. It was, therefore, good policy for the corporate managements to submit to and even favor the self-government which was inevitable from the moment the settlement began to grow. Alfred Gilman very cleverly and discreetly stated the nature of a little revolution in local affairs which was ushered in by the incorporation: "Up to this time (1826) the affairs of this community had been managed by the resident agents of the companies. No doubt, in their view, this was their prescriptive right. These companies had done much for the welfare of the people gathered here; building and maintaining a church and school houses, purchasing books for a library, and doing everything necessary for the religious, moral and physical wellbeing of the people. Incorporation as a township brought another element to the surface; the people found that they were themselves called upon to participate in the management of affairs."

The governmental business of such a community as grew up after the Merrimack company came in could not forever be transacted at Chelmsford Centre. The records of the Merrimack Manufacturing Company show that as early as November 22, 1824, the possibility of setting off East Chelmsford as a separate township was in the minds of the directors, for on that date a committee was appointed to report on a possible petition for incorporation. No action was taken at that time, but the manufacturing village was increasing fast in population and wealth. It had become a hardship to have all municipal affairs dependent on a hamlet four miles from the mills. Accordingly, just a century, as it chanced, after Wamesit Neck was formally annexed to Chelmsford, the same district, with slightly different boundaries, was made over into a new township. The new jurisdiction did not keep its former name of East Chelmsford. Kirk Boott, who decided this as he decided many other matters, admitted to a fellow director that he had narrowed the choice of designations down to "Lowell" or "Derby." "Then let it be Lowell," was Nathan Appleton's counsel, which was followed. There are some who on sentimental grounds have always regretted that the place could not have been named Wamesit; but of the historical appropriateness of "Lowell" as a designation for an industrial centre there can be little doubt.

The Town of Lowell came into existence through a legislative act of March 1, 1826, whose provisions should be quoted entire:

Be it enacted by the Senate and House of Representatives in General Court assembled and by the authority of the same:

That the North Easterly part of the Town of Chelmsford in the County of Middlesex, lying easterly and northerly of a line drawn as follows: viz., beginning at Merrimack River at a Stone post, about

two hundred rods above the mouth of Patucket Canal, so called, thence running southerly in a straight course until it strikes the Middlesex Canal, at a point ten rods above the Canal Bridge, near the dwelling house of Henry Coburn; thence southerly on said Canal twenty rods; thence a due course to a stone post at Concord River; be and hereby is incorporated into a town by the name of Lowell; and the inhabitants of said Town of Lowell are hereby invested with all the powers and privileges, and shall also be subject to the duties and requisitions of other incorporate towns according to the Constitution and Laws of this Commonwealth.

Be it further enacted, That the inhabitants of said Town of Lowell shall be holden to pay all arrears of taxes which have been assessed upon them by the Town of Chelmsford before the passage of this act, and the said Town of Lowell shall be holden to pay two-fifths parts of the balance or residue of all debts due and owing from said Town of Chelmsford on the first day of March one thousand eight hundred and twenty-six, after deducting therefrom the sum of twenty-seven hundred and twenty-six dollars, and after applying to the payments of said debt all the money belonging to said Town and all the taxes assessed by said Town of Chelmsford before the passing of this act.

Be it further enacted, That the said Towns of Chelmsford and Lowell shall hereafter be liable for the support of all persons who do or hereafter shall stand in need of relief, as paupers whose settlement was gained or derived from a settlement gained or derived within their respective limits; and in all cases hereafter wherein the settlement of a Pauper was gained or derived before the passing of this act, partly within the limits of both of said Towns, or so herein it shall not be proved within the limits of which of said towns such settlement was gained, the said Towns of Chelmsford and Lowell shall be equally liable for the support of said paupers.

Be it further enacted, That until a new valuation is taken by the Commonwealth the State and County taxes and any reimbursements required by the Commonwealth for the payment of the Representative of the present and past years of said Town of Chelmsford, which may be called for from said Towns of Chelmsford and Lowell, shall be paid jointly by said Towns, and in the proportion of three-fifths for said Chelmsford and two-fifths for said Town of Lowell.

Be it further enacted, That any Justice of the Peace in the County of Middlesex be and hereby is authorized to issue his warrant to any principal inhabitant of the Town of Lowell, requiring him to notify and warn the inhabitants of said Town of Lowell to assemble and meet at some convenient time and place in said Town to choose all such officers as Towns are required to choose in the months of March and April, and to do and transact any other lawful business relative to the affairs of said Town.

In the House of Representatives, March 1st, 1826. This Bill having had three several readings passed to be enacted.

TIMOTHY FULLER, Speaker.

In Senate, March 1. 1826. This Bill having had two several readings passed to be enacted.

NATH'L SILSBEE, President.

March 1st, 1826. Approved: LEVI LINCOLN.
A true copy. Attest: EDWARD D. BANGS, Secretary.
A true Copy from original. Attest:
SAMUEL A. COBURN, Town Clerk.

Without delay the citizens of East Chelmsford availed themselves of the provisions of the new incorporation. A warrant was issued on March 2, 1826, by Joseph Locke, a justice of the peace, instructing Kirk Boott to call a meeting of qualified voters to take action in the matter of establishing a town government.

Mr. Boott, having received the warrant, called the meeting at the Old Stone House, now the Ayer Home for Children, of which Samuel Adams Coburn, the first town clerk, was one of the proprietors. Thus was inaugurated a town government which continued for ten years. The first selectmen, chosen under the act of incorporation, were Nathaniel Wright, Samuel Batchelder and Oliver M. Whipple.

Of these earliest town fathers, Mr. Whipple, manufacturer of powder and designer of the Concord river canal, has already been encountered in this history. Mr. Wright, born at Sterling in 1785, an alumnus of Harvard college and a member of the bar since 1811, was a leading lawyer of Middlesex county. He later became mayor of the city. Mr. Batchelder was a manufacturer who had lately come to East Chelmsford and had already made a reputation which was subsequently confirmed, as a farsighted and sagacious business man. He was born at Jaffrey, New Hampshire, in 1784, and educated at the academy in New Ipswich. Since 1808 he had been engaged in one way and another in the cotton manufacture. "The peculiar thing about Mr. Batchelder," it is recalled, "was his ability to assume control of a bankrupt company and establish it on a sound and profitable basis." By invitation he had come to Lowell in 1825 at the time of the incorporation of the Hamilton Manufacturing Company, by which he was employed until 1831, when he left to take control of the Saco Manufacturing Company. He died in 1879. The new Lowell government was fortunate in having his services, if only for a short time.

Samuel A. Coburn, as just mentioned, was chosen clerk, standing at the head of a line of efficient town and city clerks. He was born in Dracut in 1795, being the oldest son of General Simon Coburn and a grandson of General Joseph Bradley Varnum. His later hotel keeping undertakings included the Merrimack House, Lowell, the Exchange Coffee House, Boston, and the Rockingham House, Portsmouth, at which last named he died in 1856. Of this officer of the township C. C. Chase said in a paper of 1890, on prominent citizens of the old days: "Lowell had but one town clerk during the ten years of the Township, Samuel A. Coburn, who was also city clerk

for about two years after the town became a city. The town records kept by Mr. Coburn are a model for his successors. Mr. Coburn belonged to the Dracut family of Coburns, and many of his relations still live in Lowell and vicinity. He was a man of fine personal appearance and agreeable manners, and well adapted to the position of landlord, in which he spent most of his life. He was landlord of the 'Stone House' on Pawtucket street and was the first to occupy it. Daniel Balch was his partner. In the Mercury for June 27, 1825, the partners advertise that they have taken the elegant house recently erected by Phineas Whiting, and pledged themselves that their cellars will be stored with old wine and the bar furnished with the best of liquors. Mr. Coburn was born in Dracut, May 13, 1795. He died in Portsmouth, New Hampshire, March 24, 1856, at the age of sixty-one years."

The first town treasurer was Artemas Holden, whose cooper shop on Pawtucket street had been one of the familiar industries in the years just preceding the coming of the Boston capitalists. Nathaniel Wright, besides serving on the board of selectment, was chosen the town's first representative in the legislature.

The boards of selectmen of the Town of Lowell succeeding that of the first year were as follows:

- 1827—Nathaniel Wright, Joshua Swan, Henry Coburn.
- 1828—Nathaniel Wright, Joshua Swan, Artemas Young.
- 1829—Nathaniel Wright, Joshua Swan, Artemas Young.
- 1830—Nathaniel Wright, Joshua Swan, Artemas Young.
- 1831—Joshua Swan, Artemas Young, James Tyler.
- 1832—Joshua Swan, Matthias Parkhurst, Josiah Crosby, Benjamin Walker, Samuel C. Oliver.
- 1833—Matthias Parkhurst, Joshua Swan, Benjamin Walker, Elisha Huntington, Samuel C. Oliver.
- 1834—Joshua Swan, Elisha Huntington, William Livingston, Jesse Fox, Benjamin Walker.
- 1835—Benjamin Walker, James Russell, William Livingston, John Chase, William N. Owen.

In the General Court the town was represented during the pre-urban period by the following:

- 1827—Nathaniel Wright.
- 1828—Nathaniel Wright, Elisha Ford.
- 1829—John P. Robinson, J. S. C. Knowlton.
- 1830—Kirk Boott, Joshua Swan, J. P. Robinson.
- 1831—Kirk Boott, Joshua Swan, J. P. Robinson, J. S. C. Knowlton, Eliphalet Case.
- 1832—Ebenezer Appleton, Artemas Holden, O. M. Whipple, Seth Ames, Maynard Bragg, William Davidson, Willard Guild.

1833—S. A. Coburn, J. P. Robinson, Cyril French, Simon Adams, Jacob Robbins, J. L. Sheafe, Jesse Fox, Royal Southwick, Joseph Tyler, Jonathan Spaulding.

1834—Samuel Howard, Kirk Boott, James Chandler, Osgood Dane, Jesse Phelps, O. M. Whipple.

1835—Kirk Boott, A. W. Buttrick, James Chandler, William Davidson, Artemas Holden, John Mixer, Matthias Parkhurst, Alpheus Smith, Joseph Tyler, O. M. Whipple, Benjamin Walker, William Wyman, J. A. Knowles.

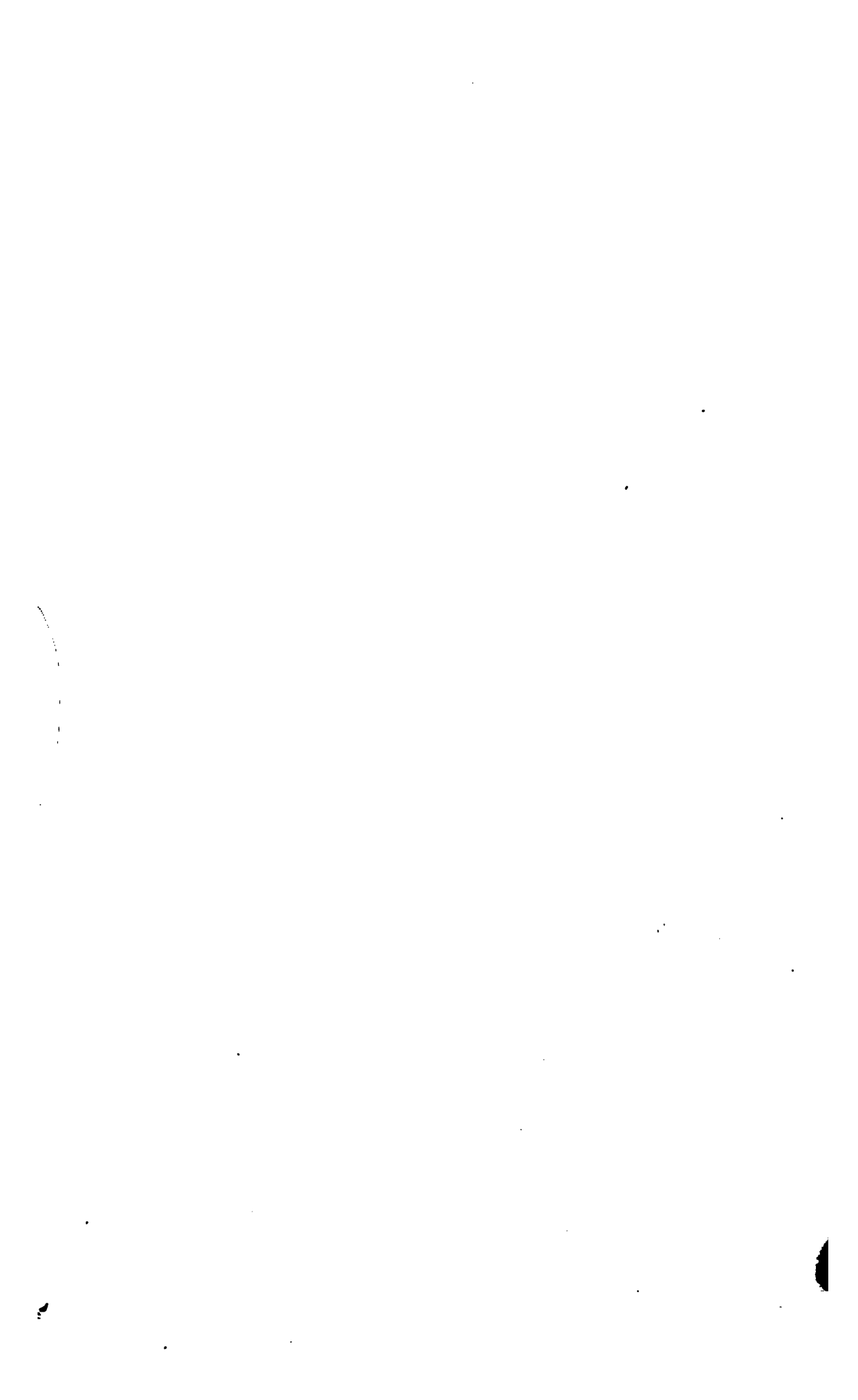
The Multiplication of Textile Plants—The growth of Lowell in population during its first decade was one of the marvels of America at a date when the upbuilding of the West had not yet made it an everyday occurrence for a city to be projected and constructed over night. When the town was incorporated it had about 2,500 inhabitants. A decade later, when it became evident that a municipal form of government would be appropriate, the community numbered about 18,000. An enumeration of 1828 showed 1,342 males, 2,190 females. In 1830 there were 2,392 males and 4,085 females, a total of 6,477. In 1836 a count disclosed 6,345 males, 11,288 females, a total of 17,633.

Outside capital having found its way to Pawtucket Falls, industrial developments succeeded each other rapidly in the new town. The size of the industrial plant even at the date of incorporation was already such as to warrant expectation that the village would presently seek admission as one of the cities of Massachusetts. The Merrimack company by the summer of 1826 had nearly finished five factories, of which three were in active operation, and two print works. The company was using cotton at the rate of 450,000 pounds annually and was making about 2,000,000 yards of goods. The cloth was well bleached, and about three-fourths of it was dyed and printed.

Five families of the rural neighborhood had been displaced to make room for the mills and boarding houses of the Merrimack company. Upwards of 1,500 persons had come in their places. The company now owned 100 tenements for the benefit of persons employed in its works. These housed 967 persons of whom 299 were males and 668 females.

These figures were exclusive of the machine shop, which housed 263 persons, of whom 162 were males and 101 females. The total estimated population of East Chelmsford in 1826 was 2,500. In Belvidere there were probably about 300 other people. Already the population was served by a dozen or more stores, a church, a school house, a parsonage nearly finished, and two hotels—the Old Stone House and Frye's Tavern.

The Merrimack Print Works, always an important adjunct of the Merrimack's company business, were started in the autumn of 1824. The first superintendent was Allan Pollock, who resigned in 1826. To





HAMILTON MANUFACTURING COMPANY.



APPLETON COMPANY.

secure a director who was familiar with the latest British improvements in printing calicoes and other stuffs, Mr. Boott took a trip abroad. He secured an expert in the person of John D. Prince, a very competent man, who held the position down to 1855, when he was retired on a pension of \$2,000.

Work on the second Merrimack mill was begun in 1824. The machinery with which it was equipped was built at Waltham. When the third mill was opened about a year later its equipment was entirely Lowell made, the product of the machine shop directed by Paul Moody.

On February 28, 1825, the proprietors of the Merrimack Company transferred their water powers, lands and other possessions outside the manufacturing and housing properties to "The Locks and Canals Company." The latter institution, under authority of the Legislature, was duly empowered to take the lands, water powers and machine shops of the manufacturing company which on its side retained its mills, and print works with land and water power sufficient for their purposes. Acting as treasurer of the Locks and Canals Company, Kirk Boott sold sites and water powers to such representatives of capital as desired them. He likewise sold much land for building lots. The company, of course, retained large possessions, some of which it still holds.

The Hamilton Company was incorporated in 1825, with an authorized capital of \$600,000. The associates named in the act were Samuel Batchelder, Benjamin Gorham, William Appleton, William Sturgis, John Lowell, Jr. Under Mr. Batchelder the Hamilton applied the power loom to making cotton drillings and other twilled goods. These stuffs proved to be very salable, bringing as high as nineteen and one-quarter cents a yard. The treasurer made a contract for all that could be made during six months at sixteen cents a yard.

Other incorporations followed. In 1828 two new manufacturing companies were added to the list—the Appleton and the Lowell—both of which forthwith began the erection and installation of plants. A large increase in possible business for the place was made possible in 1830, through the construction of the Western or Suffolk canal. This furnished power for the Suffolk, Tremont and Lawrence companies, all incorporated in 1831. Just before them, on June 5, 1830, the Middlesex Manufacturing Company had been incorporated.

The building of these mills from the first made work for the old residents of the neighborhood. Then began, for example, the extensive use of the fine granite quarries on Mammoth road, the cuttings of which have greatly reduced the bulk of Ledge Hill and Ward's Ledge. The brothers, Nathaniel and William Parker Varnum, living at Pawtucketville, became extensive contractors in furnishing split and cut

stone for foundations of the mills of the Merrimack company and subsequent corporations.

Efforts to produce other than plain goods were notable from the first years of the cotton manufacture at Lowell. It was seen then, as later, that the most substantial profits are derived from those goods in which art has added value to the raw materials. In a personal letter to trade friends in 1867 the veteran Samuel Batchelder described some of his successes at Lowell during the period of his agentship. "In 1826," he wrote, "I commenced the manufacture at the Hamilton mills, Lowell, of a twilled article known now very extensively as *Jean*. Until this time the power loom had been principally confined to what was called plain goods, such as the sheetings and shirtings. The Merrimack mills were just beginning the manufacture of a finer article for printed calicoes. Very few twilled cottons were imported, such as were purchased for particular articles of dress, and sold at a high price. So far as I could learn, these twilled goods were woven only on the hand loom in England, where the power loom had only been employed in weaving plain cloths. The production of these goods upon the power loom, at as low a price, according to weight, as plain cloth, at once opened a market for them for various purposes, for which they were better adapted than those woven plain. And being sold at little more than half the price of any similar imported article, the demand for them was considerably increased in this country, and some were exported; and among the first that were sent to Calcutta, I am told a part of them was sold for clothing the British troops in India, who, on account of the climate, being clothed in white, required something a little more substantial than the thin manufactures of the country."

For Lowell, in the first decade of its existence, thus to be making clothing for His Majesty's Indian military was, indeed, something of a technical triumph.

The share which Lowell had in the early advancement of wool manufacture was hardly less creditable than its place in the cotton industry. The high quality of workmanship in the little woollen mills that preceded the factory system has been noted. To a mechanical man who got part of his essential training while operating a mill of his own on the Concord river in East Chelmsford shortly after the War of 1812, to John Goulding, later of Worcester, belongs the credit of the invention that took wool manufacture distinctly out of the class of the handicrafts. S. N. D. North, some time director of the census, in "A Century of American Wool Manufacture," after referring to the several advances in machinery for spinning and weaving wool, several of them American devices, says: "Conspicuous among them was John Goulding's patent, which marked almost as great an advance in wool

manufacture as the spinning jenny itself. Before this invention the length of the rolls issuing from the carding machine was limited to the breadth of the card and the ends of the rolls were spliced together by hand, with the aid of the billy. Goulding dispensed with the billy altogether, accomplishing with four machines what had formerly required five, supplying the endless roll of roping, and enabling manufacturers to produce yarn for wool at much less cost, of better quality and in greater quantities than by the old process." The Goulding invention came into common use about 1824.

The success of cotton manufacturing on a large scale at Lowell seems to have inspired an ambition to show that larger units would be equally profitable in woolen manufacture. In 1830 the Middlesex company, incorporated with a capital of \$100,000, which was later increased to \$750,000, started upon a plant which was soon the largest establishment for making woolen cloths in the United States. It was able to devote twenty-seven sets to flannel making.

The supply of wool for the mills during the town period came in considerable measure from the surrounding towns, where merino and other sheep were raised on many farms, for the day of sending buyers to Puget Sound, to Argentina, to South Africa and New Zealand was not yet. A stock census of 1837 showed some fifty sheep owned in Lowell and some of the neighboring towns the following figures: Dracut, 411; Chelmsford, 150; Billerica, 126; Tewksbury, 149; Pepperell, 559. The total for Middlesex county was 4,235. In Southern New Hampshire the practice of keeping sheep was more general than in Massachusetts, for these were the figures of five towns adjacent to Lowell: Hudson, 808; Pelham, 521; Windham, 700; Derry, 713; Londonderry, 628.

Carpet manufacture began at Lowell with the incorporation of the Lowell Manufacturing Company in 1828, capitalized at \$900,000, the first company to make use of the Bigelow power loom. Probably the best account of the establishment of this very interesting industry is one which the late Hon. Peter Lawson contributed at the semi-centennial exercises of March 1, 1876, in the following communication:

Lowell, Feb. 29, 1876.

Gentlemen:—I accept with pleasure your invitation of the 25th inst., and as I am the only man of those now living who came from Medway to Lowell in 1829, I will give you my recollections of that Medway Colony.

The manufacture of ingrain carpets was started in Medway in 1826 by Alexander Wright and Eben Burdett of Boston. They had ten ingrain looms, one Brussels loom, and one finger-rug loom; and their establishment was the first of the kind in the United States. They were in successful operation in 1827 when a committee consisting of Frederick Cabot, George W. Lyman and Patrick T. Jackson, visited

the establishment, bought out all they had and took them into their employ.

The Lowell Manufacturing Company (organized in 1828) ordered them to build fifty more ingrain looms, eleven Brussels looms and seven more finger-rug looms. All who had been employed in the carpet manufactory at Medway, except Mr. Burdett, removed to Lowell in 1829. They were Alexander Wright, agent; Peter Lawson, pattern designer; Claudius Wright, foreman; Royal Southwick, overseer; John Urie, section hand on looms; Joseph Uxley, overseer on Brussels looms; John Robertson and John Hughes, first and second overseer dyehouse; Daniel Thurston; John Turnbull, carpet cloth room; David Wilson, dyer; Henry Chandler, Benjamin Smith and George W. Hunt, wood workmen; William B. Wilson, finger-rug weaver; Samuel Townsend, Thomas Railton, Job Plimpton, Gilmore Pond, Abel Brummett, Otis Bemis, Albert Adams, Hector McArthur and Benjamin Albee, weavers.

Frederick Cabot was the first treasurer, and Frederick Emerson the first clerk. Mr. Wright, the leader of the Medway Colony, remained agent of the Lowell Company till his death on June 8, 1852, at the age of 52 years. * * * The inventions of Claudius Wilson were fully described in the "Glasgow" magazine for 1826. He was one of the most ingenious mechanics whom Scotland has contributed to aid in the development of the mechanic arts.

The brick buildings of the company were erected by Elijah M. Read, who came to Lowell from Waltham, and who had charge of all the building operations, under the late Mr. Sanger.

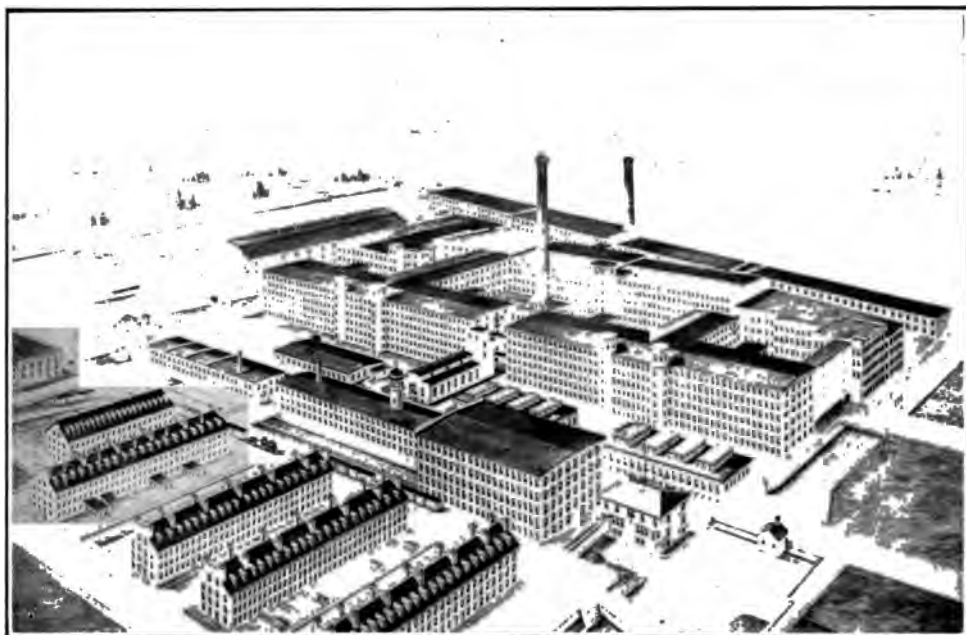
The first railroad I ever saw (and it was probably the first one in America) extended from the Suffolk Canal through the woods of Lowell street (then a dense forest) to the Lowell Company's grounds. The cars were drawn by horses, under the direction of Hugh Cumiskey, contractor, who, with the excavations of the Suffolk Canal, made the land where the Carpet Mills now stand, much of the dump being twenty feet deep.

One thing that surprised me was the novel manner of constructing the foundations. These were laid on the original surface and the earth filled in around them to the desired height. Wells were constructed in the same way, the stone curbing laid on the top of the old ground and new ground made around it till a well of the desired depth had been built up.

The first building erected by the Carpet Company was the one-and-a-half story block now standing near the counting room. There for some time were my headquarters, and many a fine string of pickerel have I caught sitting on the front steps from the branch canal (which was built in the same way as were the wells), the waters of which washed the steps of my door. In later years when the canal was constructed to the width originally designed, the present street was built between the block and the canal. These peculiarities arose from the fact that the land selected for the Carpet Company was originally a low swamp.

Yours truly,
PETER LAWSON.

Thus came the carpet manufacture to Lowell, to remain until about the beginning of the European War, when the historic plant in Market



LAWRENCE MANUFACTURING CO.
UNDERWEAR HOSIERY HOSIERY YARNS
 117,000 Spindles, 2,600 Knitting Machines, 1,200 Sewing Machines, and 4,200 Employees



LOWELL TANNERY, OF AMERICAN HIDE AND LEATHER COMPANY.

street was abandoned to be taken over by the United States Cartridge Company.

The Boston interests, in this industrial development of their factory town, were not without their continuing troubles from schemers such as Thomas Hurd, formerly of Charlestown, whose sale of Pawtucket street properties to the Merrimack company has been noted. "Mr. Hurd," as Meader euphemistically expresses it in his book on the Merrimack river, "was one of those sagacious and scheming men who seek, and whose keen sense discovers and appreciates an advantage, while other men rub their eyes and listlessly wonder what he is doing. Not satisfied with the control of this power, and seeing the advantage of possessing the great power at the Pawtucket Falls, he purchased lands on either side of the latter, and put a grindstone, or some other simple machinery driven by a water wheel, in motion, to establish his right to the privilege, and, in 1826, put up a mill at the foot of the falls; but his woolen mill on the Concord river having been destroyed by fire the same year, the mill just erected at the foot of Pawtucket Falls was taken down and rebuilt on the site of the one which was burned. A portion of the old foundation of this mill is still standing (1868) at the foot of Pawtucket Falls,—an interesting relic of the enterprise of one of those men who have left an honorable record in the history of Lowell."

The mill, it may be added, which Mr. Hurd moved down from the falls presently gave way to a substantial brick mill which the Middlesex company built on its site. This manufacturer in the late twenties operated a brick mill which took water from the Concord river by means of a canal following the course of the present Warren street. As he sometimes found water none too plentiful in summer he had a canal cut from the foot of the Hamilton canal across Central street and on to the Concord by the rear and south side of Hurd street, thus assuring himself of a full supply of water at all seasons. This auxiliary canal was afterward filled in and no traces of it are now noticeable. During its existence at least two well-known citizens committed suicide in it. In one of the financial depressions of this period Hurd went bankrupt.

The long connection of the house of A. & A. Lawrence with Lowell business began in 1830, when the Merrimack company found itself financially hard pressed and when the Messrs. Lawrence became interested in its affairs. Their firm had been founded in 1807 by Amos Lawrence, a youth of twenty-one, who arrived at Boston with twenty dollars, rented a shop and "filled it with dry goods obtained on credit." From this small beginning grew one of the most substantial fortunes of the country. Abbott Lawrence joined his brother a year later. Their store expanded into a great wholesale business. After they be-

came connected with the Merrimack Company they interested themselves directly in establishing the Tremont and Suffolk and the Lawrence corporations, and their house for many years was the principal selling agency of several of the mills. Their name was perpetuated, not only in the manufacturing company that to-day employs most people of any of the Lowell textile companies, but in the city of Lawrence nine miles down the Merrimack.

The Beginnings of an Aristocracy of Talent—An influx of ambitious and talented young men resulted from the business and professional opportunities created by the sudden growth of the erstwhile rural community of East Chelmsford. From every part of New England, and presently from the British Isles and Canada, they began to arrive, mostly youths who had already shown special ability in some mechanical or managerial direction. They constituted from the outset an aristocracy of talent such as now would hardly be assembled in a single city, so keen is the present competition for employment of expert people in all sections of the continent.

When Lowell, in brief, was practically the only town of its kind in North America, it naturally secured the very pick of aspiring young manhood. To-day youths of similar ability to these forefathers of the city still may choose to settle in Lowell in preference to some one of a score of other New England cities of the same type, or again, they may, as so often happens, turn to one of the newer and presumably more progressive industrial centres of the West or South. An opinion is sometimes expressed to the effect that Lowell in its first years was a more stimulating place to live in than it is to-day. The impression is perhaps not altogether unfounded. Yet it would be unsafe to draw from it the familiar pessimistic conclusion that the Nation and the race have somehow degenerated since 1830. The conditions were very exceptional which brought to Lowell the grandfathers and grandmothers of so many of the solidest families of the city of this century.

The youthfulness of the new Lowell may well be emphasized. It was in truth a boys' town that rose on the streets carefully laid out over the old Tyler and Fletcher farms. One is impressed by the fact that of the men who took a prominent part in the construction and conduct of the town, few were more than thirty years old when they came; many were mere striplings when they assumed responsibilities such as later would have been given only to men of mature personality. One is likely to think of the fathers of the city as grave and venerable. Most of them, however, did their best work at an age when, had they been of this generation, they would have still been playing football at Harvard or writing theses for their Tech. degrees. A surprising number of the founders, furthermore, died young. Mr. Chase in his historical sketch has shown astonishment at this circumstance. "And

here let us stop," he wrote, "to observe how short were the lives of the six distinguished men who have just occupied our attention. Only one of them reached the allotted three-score years and ten. Mr. Appleton lived 82 years; Mr. Jackson, 67 years; Mr. Moody, 52 years; Mr. Boott, 47 years; Mr. Worthen, 41 years; Mr. Lowell, 42 years. Perhaps the assumption of so great responsibilities was too severe a tax upon the human brain. The longevity of many of the ablest English statesmen, however, does not seem to warrant such a conclusion." Scores of others besides the sextet named by Mr. Chase, it should be noted, failed to attain to anything like the length of years that is customarily assumed as characteristic of the "good old times," and it is probably fair to the advance of medical science and personal hygiene to adduce that even the most intelligent people of two generations ago were more likely than the same class of men and women of now would be daily to violate the elementary principles of right living.

Many of the industrial leaders of Lowell in the nineteenth century were ineligible to become President of the United States.

Most of the British-born immigration in the first years came from three counties—from Lancashire and Gloucestershire in England and Renfrewshire in Scotland.

The draft upon the cotton towns of Lancashire came about quite naturally, beginning when on account of the Merrimack company's needing skilled artisans for their calico printing department, Kirk Boott, in 1825, went to Manchester and secured for head of this department John Dynely Prince.

It is rather an interesting story, whether or not apochryphal, which is told of Boott's negotiations concerning the salary to be paid this expert in engraving and printing. When asked how much money he would want to go to America the Englishman replied, "Five thousand dollars a year." "Why, man, that is more than we pay the Governor of Massachusetts," said Boott. "Well, can the Governor of Massachusetts print?" was the suggestive retort. Knowing that he was dealing with a man who was master of his craft, Mr. Boott engaged the Lancashire specialist at a salary that was at least two thousand dollars a year better than his own. It has been said that he never made a better bargain.

Others from Lancashire followed Prince and his family. Most of the calico printing in Lowell for many years was done by men from this county. Of this stock was Henry Burrows, who succeeded Prince in the management of the print works. The late James Duckworth was another Lancashire man. So, on the Hamilton, were William Spencer, William Hunter and Thomas Walsh. The artistic bias of several descendants of Benjamin Dean, calico printer from Clithero, is elsewhere noted.

The Gloucestershire folk came a little later. In 1837 set sail for these shores the ship "Laing," on which was a good sized group of people from the town of Uley, in that county. The vessel, which was several times in danger of foundering, made the trip to Boston in the record slow time of nine weeks. About half of the Gloucestershire passengers sought employment at Lowell, forming the nucleus of a large colony from this county. One of their number, Joseph Powell, while in the employ of the Middlesex mills, invented a well known sizing or dressing machine. The carpet manufacture also brought hither the men from Renfrew, by way of Medfield.

The Coming of the Irish—The Irish simultaneously brought in a racial stock from which some of the best men and women of the present generation in Lowell are descended.

No better picture of the situation in which hardy and industrious sons of Ireland found themselves has been drawn than that which John F. McEvoy presented at the centennial exercises in 1876. His narrative shows that the hardships under which these workers settled in their cabins and huts of the Acre were just as real as those which the original Anglo-Saxon immigrants endured nearly two centuries before them. It explains the qualities which, inherited by their children and grandchildren, have assisted materially to make Lowell what it is.

While there were individual Irishmen in the district for many years prior to the inauguration of the town of Lowell, it seems to be established that the first organized "gang" or group of laboring people of this nationality to come to the place in search of employment was one of thirty men led by Hugh Cummiskey, who walked from Charlestown on a spring morning to apply for work on the new canal. Kirk Boott, according to Mr. McEvoy's relation, met this group at the hostelry which is now the American House, gave them money for "refreshment" and set them at work on the same day. This was on April 6, 1822.

As news of abundant jobs at East Chelmsford spread in the Irish settlements at Boston, more workers followed, the single men coming up first, to be followed later by their families. "The town was in a most primitive condition," wrote Mr. McEvoy, "and the laboring classes contented themselves with the rudest kind of habitation. In 1828 they had mostly concentrated themselves in that part of the town lying west of Suffolk canal and north of Broadway, still known as 'the acre.' It is somewhat difficult at this time to conceive that with the exception of a few houses in the woods back of the First Congregational Church (Dr. Blanchard's) it was all on open common between the American House and Pawtucket Falls, but such was the fact; and it was upon this ground that the laborers pitched their camps, their

tents or whatever was obtainable to shelter their hardy natures from the wind and rain. The title to some of this land was afterwards called into question, and it was eventually decided by the United States Supreme Court in Washington under the name of the 'Paddy Camp Lands,' and the case is known in the books to this day by that title."

On June 13, 1823, Samuel Frye executed to Luther Richardson a deed of the Paddy Camp lands which, so it was alleged, was intended to defraud his own minor children. Out of this circumstance arose the litigation which lasted sixteen years. Three bills in equity were brought; one in the Supreme Judicial Court and two in the Circuit Court at Boston. Charles Sumner sat as master in one of the cases; George S. Hilliard in the others. In legal history, therefore, the Paddy Camp lands became nationally celebrated.

Plans of these "Paddy Camp" lands, so-called, it may be added, are extant in Books 373 and 380 of the Registry of Deeds at East Cambridge, and on them may be noted such thoroughfares as "Dublin Street" and "Cork Street."

Some of the first settlers, according to Cowley, had pigs in their shanties, but the more progressive soon placed the pigsties to the rear. Dennis Crowley is said to have been the first settler to apply white-wash to his shanty; Nicholas Fitzpatrick, the second.

To look into the condition of his fellow-countrymen came the bishop of the diocese in person on October 28, 1828. Services were then held in the two-story school house next to the First Congregational Church, which was owned by the town and lent to the Catholic citizens. During this period Father John Mahoney arrived once a month from Salem to celebrate mass. A day school was established in which the usual school branches were taught by a master who had had previous experience as a teacher in Ireland. Leading Irish-Americans of the day were Patrick McManus, Mr. Cumiskey's efficient superintendent; Nicholas Fitzpatrick; Patrick Powers, grocer, and John Green, who was Kirk Boott's steward.

As the Irish colony grew, the need of a church became apparent. Acting for the Locks and Canals Company, Mr. Boott presented them with a lot of land on Fenwick street, the site of the present St. Patrick's Church. Here in July, 1830, was projected a frame building seventy by forty feet which was finished in two months "much to the chagrin," as Mr. McEvoy reminds us, "unfortunately of some disfavored few who were unwilling to see a Catholic church erected in the town." Bishop Fenwick and Rev. Dr. O'Flaherty came from Boston the day before in a carryall and took lodgings at the Old Stone House. The church was dedicated under the auspices of Saint Patrick, July 3, 1831, Dr. O'Flaherty preaching the dedicatory sermon from

the text: "This place have I chosen as a house of sacrifice and prayer." The music was furnished by the Cathedral Choir of Boston, assisted by Edward Kitts, Mr. Hector and Miss Catharine Hogan, of Lowell. In 1832 Father Mahoney built a priest's house next to the church. In 1835 Father Curtin came as assistant priest. He was succeeded a little later by Rev. Father Connelly.

Early Captains of Industry—Brief sketches of a few of the most prominent of the citizens of the town of Lowell may serve to convey an impression of the industrial brilliancy of the place.

A world-famous young man who became one of the city's leading spirits was Warren Colburn, for nine years superintendent of the Merrimack Manufacturing Company, whose text-books in mathematics were known everywhere. He was of the Dedham branch of Colburns, descendants of Robert Colburn, believed to be the elder brother of Edward Colburn, first settler of Dracut, and was born in 1793. He began life as a mechanic, but having a strong taste for theoretical knowledge, and particularly for mathematics and the sciences, he began in young manhood to prepare for Harvard College, which he entered at the age of twenty-four. He took his Bachelor of Arts degree in 1820. In college he had shown special aptitude for higher mathematics. For a short time after graduation he taught at a boys' school in Boston. While thus engaged he wrote and published "Colburn's Arithmetic," one of the most celebrated text-books of educational history. In April, 1823, he gave up teaching to take charge of the upper mills at Waltham. In less than a year after this appointment he was called to Lowell to fill the office of superintendent made vacant by the death of Ezra Worthen. During the period of his holding that responsible position Mr. Colburn kept up his interest in mathematical and scientific subjects. His pre-occupation with astronomy was a recreation such as few "tired business men" of the present day would care to indulge, involving, as it did, much direct study of the heavens at midnight. His untimely death removed a most promising citizen.

In 1833, succeeding Mr. Colburn, was chosen to the agency of the Merrimack Company John Clark, born at Waltham in 1796, a graduate of Harvard College and former school teacher. Mr. Clark was a very capable and far-seeing business man under whose management the Merrimack Company prospered. His name will also be noted in connection with the city library, to whose initial problems he gave much of his best thought.

Alexander Wright (1800-1852), first agent of the Lowell Company, and believed to have been the first chemical bleacher in America, was among the industrial leaders of the town. His father, Duncan Wright (1776-1836), had learned the bleacher's trade in Scotland. In

1812 he sailed for America, purposing to settle at Philadelphia. The ship, however, on which he was a passenger, was captured by an American privateer and taken to Bristol, Rhode Island. It happened that Captain DeWolfe, who was in charge of the privateer, was also interested in the Arkwright factory at Dighton, and finding that he had a bleacher among his captives, promptly sent him to the Massachusetts village, where he was made superintendent of the bleachery. The young Scot liked his work so well that as soon as the war was over he sent for his wife and three sons. Shortly after the arrival of his family Mr. Wright took a new position, also as bleacher, at Smithfield, Rhode Island, and thence removed to Waltham, where he started a bleachery of his own; this he later sold out to the Boston Manufacturing Company. In 1820 he went to Medway and opened a bleachery which he carried on for several years with good success.

The son Alexander was hence born and brought up in the textile industry, as it were. In 1820 he engaged in manufacturing coach laces at Medway. In 1825 he became interested in the subject of carpet manufacture with a view to introducing it into New England. He went to Philadelphia, where a small carpet factory was in operation, to which he was refused admission. Then he took passage for Scotland, where he had relatives, and in 1826 he returned to the United States, bringing three looms and two operatives, Claude and William Wilson, who knew how to get results from the loom. Despite a storm that nearly wrecked the ship Mr. Wright and his machines reached Medway, where the looms were set up and put to work. The venture was not very successful financially, and Mr. Wright disposed of it to Mr. Burdett, through whom it passed into the hands of Boston capitalists. After the completion of the Lowell company's buildings, Mr. Wright left Medway to become the superintendent under whom the first carpet was made in the plant of the new company. Some ten years later it was Mr. Wright who gave to E. B. Bigelow the encouragement that led to his inventing the Bigelow loom, destined to revolutionize the carpet industry. From first to last Mr. Wright took an active part in all movements for community betterment.

Another of the characteristic business men of this period of Lowell history was Royal Southwick, born at Uxbridge, September 9, 1785, being a lineal descendant of Laurence and Cassandra Southwick, celebrated by the poet, Whittier—Quaker folk whom a Puritan magistrate sentenced to be shipped to Barbadoes and sold as slaves. A ship captain, as the story is related, refused to take them, but man and wife were whipped at cart's tail through Boston streets. Royal Southwick, in 1826, married Direxa Claflin, daughter of Major John Claflin, of Milford, who was a sister of Horace B. Claflin, founder of one of the most famous of New York commission houses.

In 1829 Mr. Southwick came to Lowell with Alexander Wright and others, taking charge of the departments of carding and spinning in the carpet factory. In 1844 he went to England to study systems of manufacturing and on his return he bought a factory of his own at North Chelmsford. About ten years later he also acquired the Wilton Manufacturing Company. He continued to live in Lowell until 1859, when he removed his residence to Boston. He was an enthusiastic Whig and supporter of Daniel Webster and yet was so open-minded on the slavery question that he entertained the English agitator, George Thompson, in 1834, when it was not exactly the popular thing to do so and he later befriended Frederick Douglass and Charles Lennox.

To the agency of the Middlesex company in 1830 came James Cook (1794-1884), from his birthplace, Preston, Connecticut. He had learned the woolen industry in his father's fulling mill, a knowledge that stood his new company in good stead, for in the third year of his management the shareholders received dividends of thirty-three per cent.

To superintend its hydraulic work, the Locks and Canals Company secured the services of a celebrated engineer in the person of George Washington Whistler, of a Baltimore family. Major Whistler arrived in Lowell, after making a reputation through his skillful work in surveying a line for the railroad between New York and Boston—the present Shore Line of the New York, New Haven and Hartford Railroad. During his occupancy of a plain wooden house in Worthen street, Mrs. Whistler gave birth to one of the most famous artists of modern times, James McNeil Whistler. The family removed to Russia, after a brief residence at Lowell. In that period of residence, Major Whistler had successfully started on his career, James Bicheno Francis, the father of modern hydraulic engineering.

An accession from Newburyport was John Dummer, after whom Dummer street was named, born in the town at the mouth of the Merrimack in 1791, and an early associate of Paul Moody. Mr. Dummer was a very skillful mechanic. Between 1815 and 1822 he was in the employ of the company at Waltham, resigning to help in the construction work at East Chelmsford. He personally attended to the installation of all wheel work, shafting and other mechanical fixtures.

Among the inventions the application of which was credited to Lowell in this period, was a very important machine for grinding spindles. This device, taking the place of grinding by lathe, which was uncertain and ineffective, was the work of Benjamin Green, born at Warwick, Rhode Island, in 1784, and apprenticed at the Slater mills. After work at Pomfret, Killingly and other places in Connecticut, Mr. Green went to White River village, Vermont, where he perfected

the machine on which he had been working for some time past. In 1831 he came to Lowell to take charge of the Merrimack Company's repair shop and there gave a demonstration of his revolutionary innovation in grinding spindle grinding. Like many inventors he was negligent of his own interests. He allowed his machine to be used freely in the Lowell mills without a cent of royalty. He later lost his position in the repair shop and became a mechanic in the Lowell Machine Shop, where, being a very devout communicant of St. Anne's Church, he spent much of his best thought in ways to combat a prevalent scepticism among his fellow employees.

One who brought to Lowell valuable experience gained in the factories of southern Massachusetts was Ferdinand Rodliff, born at Seekonk, February 6, 1806. At seventeen he had been chosen overseer of spinning at the Central mill, Seekonk, and at twenty, overseer of the Messinger Mill, Canton. He was only twenty-one when he came to Lowell to enter the employ of the Hamilton, of which he was for many years the beloved assistant superintendent. In his life time of more than ninety years Mr. Rodliff saw, certainly, a most marvellous development of the cotton industry which he had entered at the age of seven years, on wages of fifty cents a week.

In 1826 there landed at Boston, with only two shillings in his pocket, one of the first of the many natives of Great Britain who have helped to upbuild Lowell. This was Charles Stott, born August 21, 1799, at Rochdale, Lancashire, long famous for its woolen manufactures. Young Stott at seven went to work in a factory, the hours of labor for the little youth running from five in the morning until nine at night. Something in the boy's nature may have revolted from this kind of exploitation, only too common in the "merrie England" of that day. After, at all events, some ventures in other lines of business he determined to seek his fortune in America. It was characteristic of the man that of the two shillings with which he landed he spent only one; the other was kept to be preserved religiously in the archives of the notable family which he founded. Mr. Stott at first secured employment at Andover and then, in 1828, with three others, he took over the Merrimack woolen mills at Dracut, whence, in 1835, he was called across the river to manage the Belvidere woolen mills, of which for forty-six years he was either manager or owner. Mr. Stott was one of the markedly successful manufacturers of his time, and so devoted to business that even after he became too infirm to attend to details he would request to be taken in front of some machine whose workings he would watch by the hour.

One of the Gates family of Stow was Josiah Gates, who first appeared at Lowell in 1826, to be employed in the fulling department of Thomas Hurd and then of the Merrimack Company. He later

became an overseer in the weaving department of the carpet company and, after 1845, a manufacturer of leather, opening the tannery on Chelmsford street, which stood at the very beginning of Lowell's participation in the modern shoe and leather trade.

For two years, beginning in 1835, one of the most celebrated of American inventors was a resident of Lowell. Hither migrated Elias Howe, Jr., from central Massachusetts, and here he probably received the initial impulse toward the sewing machine with which his name is associated. "While here," writes Charles Cowley, "he probably became acquainted with the experiments which John A. Bradshaw was then making with the sewing machine. Nine years later he invented the famous lock-stitch sewing machine, for which he obtained a patent in 1846. Little, however, did he appreciate the value of his invention; for he offered to sell his patent for the sum of \$500—a patent from which he afterward realized half a million dollars in a single year. He died October 3, 1867, at Brooklyn, New York."

From Marlboro an arrival was that of Wesley Sawyer (1810-1879), son of a satinnet manufacturer of that place, who in 1824 secured employment in the Howe mill, in Belvidere and at nineteen became its superintendent—a man of most extraordinary mechanical genius. It was later said of him: "It always seemed to me that wherever Wesley Sawyer went there was sure to be a turning over of the machinery of the mill. He was a born mechanic, and could not only see the necessity of a machine to do what was done by hand, but could produce the machine or mechanism necessary to do it." One of his first inventions was a wire heddle for loom harnesses, taking the place of the former hand knit harnesses, made by women of families living near the mill. His subsequent inventions included the familiar shawl fringer, which knots the fringes of shawls and toweling (an operation formerly performed by hand) and a machine for woven wire netting which was the basic asset of the Lowell Wire Fence Company, of which Mr. Sawyer afterwards became president.

The value of the training in Lowell workshops in these first years of the new city was such that surprisingly many of the distinguished manufacturers of other New England cities had their first practical education in the Spindle City.

Of such sort was Jonathan Sawyer, who for many years made the finest grade of cassimeres known to the American textile trade. Mr. Sawyer was born at Marlboro in 1817 and was brought at the age of twelve by his widowed mother to Lowell. He was a member of the first class of the Lowell High School, having General Benjamin F. Butler as one of his classmates. He entered Wesleyan University, Middletown, Connecticut, but remained for only two terms when he went to work as a dyer in Lowell. He learned the busi-

ness thoroughly and later became a large manufacturer on his own account at Dover, New Hampshire. The Sawyer cassimeres and suitings were premiated at the Philadelphia Exposition in 1876. Mr. Sawyer was a notable figure in his day, an active anti-slavery man and very independent commercially, even to the point of always making direct sales of his product instead of selling through commission houses. Only in early life was he identified with Lowell.

Abraham Howe (1789-1861) was a Marlboro man who came to Lowell to live before it was incorporated as a city and whose inventions included the revolving shuttle-box for looms, the tenon bit and the whip or belt saw. His son, Edward B. Howe, became a notable manufacturer of cards in Lowell.

James Dugdale, a mechanic from Lancashire, England, was one of the first of the many Lowell inventors who have furthered the textile industry. He came in 1825 as overseer on the Merrimack and soon thereafter devised the "dead spindle," which revolutionized methods of spinning coarse yarns.

William W. Calvert, who reached Lowell in 1825, was an ingenious inventor, as was his even more distinguished brother, Francis Calvert, to whom the textile industry owes the burring machine, the comber and the cotton willow. Francis Calvert also introduced the first worsted spinning machinery into Lowell.

George Wellman (1810-1864) was still another inventor of textile machinery who settled here before the incorporation. He was made foreman of a carding room on the Merrimack in 1835, in which position he began a series of inventions that included the stop motion employed on the dressing frame and winder, a self top card stripper and other very important devices.

Much of the substantial building of the oldest parts of Lowell was due to the conscientious work of Humphrey Webster (1781-1847), a cousin of Daniel Webster, who was born at Boscawen but resided as a youth at Newburyport before he came to East Chelmsford as a builder and carpenter. This typical business man of his day erected the buildings of the Merrimack Print works, including the famous "John Bull's Row," occupied by calico printers and engravers who had been brought hither from England. The Hamilton corporation block on Central street just south of the canal bridge is his. He built the agents' houses of the Appleton corporation and the Lowell Machine shop, and the large blocks of houses owned by the Boott and Tremont corporations. His row of cottage houses on Merrimack street between Kirk and John has now disappeared. He did the carpentry on the old town hall, built in 1828-29. He was in part responsible for the construction of Central bridge, of which he had

charge from the opening down to his death. He is said to have employed an average of 50 to 60 men whose hours of work in summer were thirteen, beginning at five o'clock, with half an hour out for breakfast at seven, then to noon and half an hour for dinner, and so on to seven o'clock. Mr. Webster at first lived on the Merrimack corporation. Later he moved over to Christian hill, where the Webster mansion is still one of the landmarks.

A man of very interesting personality, Mr. Webster took especial pride in the achievements of his distinguished kinsman who always looked in on him when he came to Lowell. Of his business habits it is said that he balanced his books each night with every individual by whom he was employed, for it was one of his principles to have no debts. He was notably abstemious in his habits of eating and drinking.

A New Hampshire youth, founder of a good Lowell family, was Stephen Mansur (1799-1863), who was born at Temple and who, as a result of youthful employment on the Erie canal, came to Lowell in 1822 to act as superintendent of the job of widening the old canal between the guard locks and the machine shop. He was at this time proprietor of a hotel in Boston, a position which he did not relinquish until 1830, when he became a resident of Lowell for good and all, engaging in the hardware and housefurnishing business and serving the community in many useful capacities. He was an assessor under the town government and a recognized expert in real estate values.

From Fayette, Maine, in 1828, arrived Edward Tucke, descended from Robert Tucke, surgeon, who in 1638 settled at Hampton, New Hampshire. Mr. Tucke entered the employ of Samuel A. Coburn, then proprietor of the Old Stone House, whose sister he married. He later founded the first express business between Lowell and Boston.

From Portsmouth was Josiah Greenough Peabody, descended from Lieutenant Francis Peabody, one of the original settlers of Hampton. In 1824 he began learning the builder's trade at East Chelmsford with John Bassett. In 1832 he was employed upon the Merrimack House and on Central Block, the first four-story building in the town. Later contracts, when he was in business for himself, were the Savings Bank building on Shattuck street, the Kirk and Lee street churches; two mills for the Boott corporation and two for the Massachusetts corporation; the Varnum school house, and many structures outside Lowell.

Old-Time Merchants of Lowell—Growth of mercantile businesses was a natural consequence of the incoming of a new and fairly well paid population to East Chelmsford. At the time Kirk Boott negotiated with the local farmers for their lands there was but one store in the present territory of Lowell south of the Merrimack and east of

Black brook. This was the general trading establishment of Captain Phineas Whiting at the corner of Pawtucket and School streets, where the Frederick Ayer mansion was built later.

Soon after the Merrimack Company began operations, a second store was started just over the Concord in Belvidere. Thereafter, as was but natural, the number of traders increased rapidly and there was soon a considerable differentiation of establishments, succeeding the country stores of which Captain Whiting's place was typical. Not all the new ventures were successful, and it is recorded that Lowell got rather a bad reputation with credit men in the thirties because so many adventurers came in and tried to start business with "a shoe string" as capital. Others succeeded and laid the foundations for some of the solidest fortunes in the city of to-day. The successful merchant in Lowell has always held an enviable social position, and every incentive has been offered to young men of the finest type to engage in trade. The late Charles Hovey, in a paper read before the Old Residents' Association in 1880, listed the traders who conducted shops in Lowell between 1822 and 1832 as follows: Phineas Whiting, H. & W. Spalding, Alpheus Smith, John Richardson, Warren Dyar, Jacob Robbins, George H. Carleton, Horace Howard, Roland Lyman, Meacham & Matthewson, William W. Wyman, Samuel L. Wilkins, Paul H. Willard, William Davidson, Aaron H. Safford, Mansur, Child & Company, Ransom Reed, Hazen Elliott, Henry J. Baxter, William S. Bennett, Daniel Sanderson, Whidden & Russell, Wentworth & Raynes, John T. Pratt, H. W. Hastings, Charles H. Sheafe, John Putney, Joel Stone, Thomas Flint, Thomas Billings, Atherton & Buttrick, Frye & Abbott, James K. Fellows, William Bascom, Perez Fuller, U. S. & T. P. Saunders, James Tyler, Paul R. George, Philip T. White, Daniel E. Knight, S. & T. P. Goodhue, Charles Sanderson, Jonathan Kendall, Edward Sherman, Mathias Parkhurst, J. L. Foote, Luther Richardson, William C. Gray, Dennis Fay, E. B. Patch, Charles Green.

The first Lowell directory was printed by Thomas Billings in 1832. It contains the names of thirty-two traders. Among the occupations are some called by names that are now obsolete, such as "cordwainer" and "yeoman."

The many young men of mechanical and executive ability who, like those just mentioned, were brought to Lowell by the new opportunities were but a handful, of course, as compared with the host of young women whom the mills called from country homes. Hundreds of men and women of the present generation are proud of grandmothers who got their start in life through working in the factories. If in later decades a foolish stigma was sometimes attached to labor at the loom and spinning frame, such a condition was due to the un-

fortunate spirit of caste that was increased when people from overseas began to throng the mills. While social distinctions existed most decidedly in the town of Lowell as everywhere else in the quondam British colonies, these were not of a sort to be insurmountable barriers.

Genesis of the Lowell Factory Workers—No better description of the kind of young women who came to Lowell from the nearby townships, from New Hampshire, Vermont and Maine, has been written than that in Harriet H. Robinson's "Loom and Spindle:"

In Lowell, at first only a few came; others followed, and in a short time the prejudice against factory labor wore away, and the Lowell mills became filled with blooming and energetic New England women. They were naturally intelligent, had mother wit, and they fell easily into the ways of their new life. * * * Some were not over ten years old, a few were in middle life, but the majority were between the ages of sixteen and twenty-five. The very young girls were called "doffers." They doffed or took off the full bobbins from the spinning frames and replaced them with empty ones. These mites worked about fifteen minutes every hour and the rest of their time was their own. When the overseer was kind they were allowed to read, knit, or go outside the mill yard to play. They were paid two dollars a week. The working hours of all the girls extended from five o'clock in the morning until seven in the evening, with one-half hour each for breakfast and dinner. Even the doffers were forced to be on duty nearly fourteen hours a day. Those of the mill girls who had homes generally worked from eight to ten months in the year; the rest of the time was spent with parents or friends. A few taught school during the summer months. Their life in the factory was made pleasant for them. In those days there was no need of advocating the proper relationship between employer and employed. Help was too valuable to be ill-treated.

One is impressed in reading between the lines of such accounts as this, with the possibility that this "golden age" may have had its tarnished aspects. Relatively light as the work undoubtedly was, for the present-day speeding-up processes had not then been conceived by factory managers innocent of "efficiency," the long hours, seemingly, must have produced superabundant fatigue in many of the operatives, and the effect of the toxins thus caused was the same in 1826 as in 1918. Child labor, again, is child labor, and it denies the right of normal childhood to unfettered play and frequent changes of occupation, even if it is so conducted that the children doff bobbins only once an hour during a fourteen-hour day. We shall later find the Rev. Henry A. Miles engaged in a defence of, which was tantamount to an apology for, the very long hours which women and children were obliged to labor in the Lowell mills prior to 1845. There is also an intimation that the democracy of the time was not very far-reaching in Mrs. Rob-

inson's statement that "the most favored of the girls were sometimes invited to the houses of the dignitaries of the mills, and thus the line of social division was not rigidly maintained."

The conditions of employment, nevertheless, were unquestionably better during the township era of Lowell history, from the point of view of the welfare of the employed, than they became after the influx of several different races had broken up the first homegeneousness of the population.

Early Real Estate Developments—Merrimack and Central streets were laid out in their present directions and dimensions about 1822. The triangular tract at the head of Central street was sold by the Locks and Canals Company to Patrick Tracy Jackson, of Boston, who paid for it what was then regarded as the extravagant price of thirteen cents a foot. By a few of the more foreseeing, however, it was appreciated that this location, directly across the street from Carter's Tavern, later the Washington House, would always be of commanding commercial importance. Here subsequently William Livingston erected a business building which was so magnificent in its appointments that many predicted financial loss from it. In this, however, they were mistaken. The ground floor of the building was occupied by Mr. Tower with his very successful dry goods store, and thus arose the name of Tower's corner, by which the junction point of the several streets that "fan" into Central street is now known. In 1873 an ineffectual attempt was made to remove the Livingston building and to create in its place a public square.

The residential districts of the town were mostly very close to the mills in the era of long hours and no street car facilities. The streets between Lowell (now Salem) street and the present Little Canada were well occupied before 1836, and there was a good population between Thorndike street and the Concord river. The present development of the Highlands was hardly thought of and even School street hill was not yet divided by streets. The "court end" of the town, to which Kirk Boott removed his fine residence (now the Corporation Hospital) when the land on the old Tyler farm was wanted for other purposes, was along Pawtucket street, where several of the oldest families had good houses before the founders of Lowell came in. One of the strong arguments in favor of this section for exclusive residences was to the effect that on account of the prevailing west and northwest wind it got very little of the smoke from factory chimneys.

A rival residential district to Pawtucket street began to be created across the Concord river from about 1830 onward.

The somewhat baronial "Old Yellow House" that could be seen amidst its poplars from the site of Kirk Boott's mansion on the former Tyler farm has been mentioned. It stood on land which in 1691 had

been deeded by Adam Winthrop to Samuel Hunt. The house in 1816 had been bought by Judge Livermore as an ideal country place. That it was such is well attested by reminiscences of his daughter, Mrs. Josiah G. Abbott. "The house was delightfully situated at the confluence of the Merrimack and Concord rivers," she wrote. "Standing at an elevation of 40 feet above the water it commanded a distinct and lovely view of both the streams. Back of the heights, on the opposite side of the Merrimack, rose Dracut Heights, as if to shield the spot from the north winds. It was certainly a lovely old mansion." Here for a number of years Judge Livermore lived in retirement after an active career in which, as jurist and member of Congress, he emulated the services of his father, also Judge Livermore, of the New Hampshire Supreme Court. He died in 1832 at the age of seventy.

The first proprietor of "Belvidere" was, in fact, an interesting personage. Edward St. Loe Livermore, a descendant of John Livermore, one of the first settlers of Watertown, was a son of Chief Justice Samuel Livermore, of the New Hampshire Supreme Court. His father (1732-1803) married Jane, daughter of the Rev. Arthur Browne, the first Episcopal minister settled in New Hampshire. In 1765 he began the settlement of Holderness, Grafton county, where on the Pemigewasset river he built the huge mansion that subsequently became the Episcopal Seminary for the diocese of New Hampshire. He was a representative in the first National Congress and a member of the United States Senate for nine years, during a portion of which time he was President *pro tempore*. His son Edward, who was born at Portsmouth in 1762, had his early education at Londonderry and Holderness, with the Rev. Robert Fowle as his principal tutor. He studied law at Newburyport with Chief Justice Parsons and began his practice at Concord, New Hampshire. Soon after the death of his first wife, who was Mehitable Harris, Mr. Livermore removed to Portsmouth. For several years, by appointment of President Washington, he was United States District Attorney. In 1798 he became justice of the Supreme Court of New Hampshire. In 1799 he married Sarah Crease, daughter of William Stackpole, merchant of Boston, still remembered by older residents of Lowell, where she died in 1859. Her name is perpetuated in Stackpole street.

In politics Judge Livermore was a Federalist. When in 1802 he moved to Newburyport, that centre of Federalism at once elected him State Senator. "His course there was so wise and judicious," his daughter wrote, "that he was chosen to represent the North Essex District, then so-called, in Congress." In 1807 he actively opposed President Jefferson's Embargo Act. He retired from Congress in 1811 and moved his residence to Boston, where he was out of public affairs for several years. His attitude to the War of 1812 was that of

many leading New England Federalists, one of intense hostility. Shortly after the war, Judge Livermore and his family went to Zanesville, Ohio, intending to settle there. The discomforts of what was then a pioneer settlement proved too much for them and they soon returned to Boston. The desire for a peaceful country life was strong in Judge Livermore, nevertheless, and led to his buying the Old Yellow House, in Tewksbury, in 1816.

That good society was the rule at the Old Yellow House may be judged from the daughter's description of her father's habits of living: "For many years Judge Livermore had associated with men prominent in letters and in politics, in this and other countries, and had taken an active part in the political transactions of the times, so that, being endowed with a comprehensive memory, he had at his command a large fund of anecdotes, and his conversation was agreeable and instructive to all with whom he came into contact. When he bought the Gedney estate in Tewksbury he called it 'Belvidere,' a most appropriate name for so beautiful a place. Until 1826 the nearest place of public worship was about two miles from 'Belvidere,' at Pawtucket Falls, where the Rev. Mr. Sears, a Presbyterian minister, preached for many years, and here the Livermore family became constant attendants."

After the opening of St. Anne's the Livermore family naturally transferred their affiliation to a church that was not only near at hand, but of their inherited choice. At the first meeting of the new parish a pew was placed at the disposal of Judge Livermore. This was occupied, down to comparatively recent days, by Miss Elizabeth Browne Livermore.

"Judge Livermore lived to see a large and flourishing city grow up around the lonely spot he had selected for a quiet home, and to gather round his fireside neighbors who would have graced society in any city of the world. He died at 'Belvidere' on the 15th of September, 1832, at the age of seventy years, and was buried in the old Granary Burying Ground in Boston. He left seven children by his second marriage, four of whom are still living, *viz.*, Elizabeth Browne Livermore, who lives at Lowell and is unmarried; Caroline, the wife of Hon. J. G. Abbott, of Boston; Sarah Stackpole, wife of John Tatterson, Esq., of Southbridge, Mass.; and Mary Jane, wife of Hon. Daniel Saunders, of Lawrence."

The Nesmiths, Developers of Belvidere—After Judge Livermore's death, Belvidere was sold to John and Thomas Nesmith for about \$25,000. These brothers were descended from Deacon James Nesmith, who settled in Londonderry in 1719 and who was an elder in the Presbyterian church. His eldest son, Thomas, moved over into the adjoining town of Windham, where he acquired a large estate. His grand-

sons, just named, were John and Thomas, founders of families which have had a great share in the upgrowth of Lowell. John Nesmith, born in Windham, August 3, 1793, was, in especial, a man of large affairs. As a youth he rose to prominence, serving as treasurer of his native town in 1819-20 and as its representative in the New Hampshire Legislature in 1821. In 1821 he and his brother Thomas engaged in manufacturing at Derry. They also made a venture in New York, where they started an extensive and remunerative business. In 1831 they came to Lowell.

Arrived in Belvidere the Nesmiths in far-sighted fashion laid out the scheme of streets which now covers the finest residential quarter of the city, retaining ample locations for their own noble residences, still standing.

Previous to this developmental work, it should be noted, Belvidere had never been highly esteemed as a place for select residences. It had, however, all through the town period, an up and coming population, some of the members of which gave no end of trouble to the sedate farmers of Tewksbury. For five or six years there was an ever-increasing demand on the part of Belvidere for annexation to the town of Lowell, in which most of the bread-winners worked and where their real interests lay. Their demand was at first resisted by Tewksbury, whose citizens viewed with alarm the loss of much of their taxable property. Militant methods of protest, however, finally won over the town to a policy of letting the turbulent village go in peace. "We used," wrote George Hedrick, years afterwards, "to charter all the teams, hay carts and other kind of vehicles and go down [to town meeting at Tewksbury Centre] and disturb the people of the town by our boisterous actions. As we neared the village a 'hurrah' gave the warning of our approach. We took extra pains to have a full turnout, make all the trouble we could, and have, for a day in the year, a great time. At twelve o'clock we adjourned to Brown's tavern for dinner, and hot flip and other favorite beverages of those days were freely partaken of. We met again at two o'clock and kept up the turbulent proceedings until seven, and returned well satisfied with our endeavors for the good of the town."

On one occasion, Mr. Hedrick recalled, the "rough element" succeeded in passing a resolution to the effect that the next Tewksbury town meeting should be held in Belvidere. This was too much. The townsmen finally capitulated and consented to the annexation, which became effective May 29, 1834.

How the growth of the new manufacturing town affected the quiet rural neighborhood opposite the confluence of the rivers was described with not a little literary charm in 1891 by "M. W.," who wrote on "Old Dracut" for a booklet called "Our Home" and published in aid of the Home for Young Women and Children.

Of Christian Hill, formerly "Dracut Heights," the author said :

One whose childish memories commenced before the century had completed its fortieth birthday has in her mind a fair picture of a gracefully shaded country winding over a wooded hill upon the crest of which was a noble pine tree, a landmark for miles around. This hill, where our city now stores her pellucid and healthgiving waters, was intersected with many grassy paths and shaded wood roads through which Sarah, Helen and I wandered all the summer days. * * * Below lay the sparsely settled village of Centralville, then a part of Dracut, and a mere cluster of houses. On the hillside were as many, perhaps, as could be counted on the two hands. There were a few good old homesteads with fine trees about them, a typical country store, a public house and an academy.

But the village road led to Lowell, that wonderful town across the river that had sprung into busy life under the eyes of the old settlers of Dracut, while they were blinking at it with astonishment ; and between them and it hung the covered wooden bridge of the period, dark and gloomy, and full of suggestions of a "foul and bloody deeds." It was the ugliest structure that ever connected shore with shore, and through it the village maiden, stranded in the twilight, hurried fearfully, with throbbing heart and many an anxious backward look.

At the Dracut end of the bridge was the toll house, small and prosaic, but full of sunshine. It was a place of more than common interest and had a distinct individuality. It was the spot where a choice bit of news or gossip, flying through the air, was sure to lodge. The Lowell paper would always be read there, and "lost, strayed or stolen" posted.

The development of the suburb of Centralville as a district of Dracut began while Lowell was still a township.

Two men were especially responsible for foreseeing the residential possibilities of Christian Hill and the adjacent low lands. Joseph Bradley was of the old Haverhill family which had settled on the Dracut side of the river to operate the ferry that long went by their name. His son-in-law was Benjamin Franklin Varnum, one of the sons of Major-General Joseph Bradley Varnum. These gentlemen inaugurated the first petition to the General Court for a bridge, and, when the requested corporation was sanctioned in 1825, Mr. Bradley was elected its president and Mr. Varnum its clerk. A little later the Varnum residence was started on what was then known as Dracut Heights with grounds of unusual pretension for the place and time. The locality became known as Centralville, to distinguish it from other and supposedly more outlying parts of the town of Dracut.

To the initiative of these two men was due the project of an academy on Christian Hill, together with a large boarding house for students. This educational institution was incorporated under the style of Centralville Academy. The schoolhouse was on the site now occupied by the Varnum school, which was given its name in honor of this

son of Speaker Varnum, and not, as has often been stated, of the Speaker himself.

Politics in the Town Period—The political as well as the industrial growth of the new community was rapid in the period between the two incorporations. The time was one in which men took their politics very seriously, in which respect Lowell was not exceptional.

The first Congressional election in which Lowell citizens cast votes was that of November 6, 1826. Edward Everett, Whig, was chosen over John Keyes, Democrat. This distinguished orator, some time president of Harvard College, continued to represent Lowell at Washington down to 1830, when a new arrangement of Congressional districts separated the northern from the southern towns of Middlesex county. Everett's successor was Gayton F. Osgood, of Andover, a Democrat. He was followed, in 1835, by Caleb Cushing, who was elected "after a contest," according to Cowley, "rarely equalled in the annals of party strife." Mr. Cushing continued to represent the Lowell district until 1843. He subsequently became a justice of the Supreme Court, Attorney-General of the United States, and president of the Charleston Convention of 1860.

The political complection of the town of Lowell is indicated by the presidential votes of three successive elections: 1828—Jackson, Democratic, 97; Adams, Federal, 278. 1832—Jackson, Democratic, 412; Clay, Whig, 694. 1836—Van Buren, Democratic, 894; Webster, Whig, 878.

Local political complications were occasionally of an exciting nature. All that was best in the town meeting system undoubtedly came uppermost before a city government was inaugurated. While politics was then a game, it had not, to any alarming extent, become a graft. Men of the highest character were chosen, usually, to direct town affairs. The annual meetings had their lively discussions, their wholesome ebullitions of democratic spirit; but public business was not hindered by them. Considering the resources of the community the appropriations for support of the local public institutions were generally liberal.

Until 1824 there was no post office at East Chelmsford. In that year Jonathan C. Merrill was installed as first postmaster. He was a merchant whose post office business, the salary varying according to the receipts from \$80 to \$362, was necessarily subordinate to the conduct of his store on Tilden street, near Merrimack. He was succeeded in 1829 by Captain William W. Wyman, appointed by President Jackson. Captain Wyman, who down to his death in 1864 was one of the city's prominent citizens, had a salary varying from \$625 to \$1,000. His office was at first on Central street and later in the city government building at Merrimack and John streets. In 1833 President Jack-

son appointed to the postmastership, the Rev. Eliphalet Case, a staunch Democrat, who later removed to Ohio. With A. C. Bagley, also a Lowell man, he settled in Cincinnati, where he engaged in the publishing business. He was for some years editor and part owner of the "Enquirer." About the beginning of the Civil War he removed to Portland, Maine, and bought the "Advertiser." He died December 15, 1862, aged sixty-six years. In some reminiscences contributed by Hon. J. G. Peabody to the "Courier Citizen" history of 1897, it is stated that he "finally went to Indiana, engaged in farming and died there." This statement of Mr. Peabody's, evidently made from memory, must have been erroneous, as the "Lowell Citizen" published an obituary, rather lengthy and circumstantial for the time, on December 18, 1862.



CHAPTER VIII.

An Era of Improvement.

Commencement of the Lowell School System—It was characteristic of the temper of the community that the institutions of public education were exceptionally well started in the first decade of municipal existence. Provisions for schooling had not figured so very heavily in the budgets of the towns out of which the territory of Lowell was taken.

One of the first schoolmasters, a worthy predecessor of many who have served the community in this essential capacity, was Joel Lewis, born at Canton in 1800. When the Merrimack company in 1824 opened its school on the site of the Green school, this young man was employed as teacher. He had had experience already, having begun to teach at Braintree as a boy of eighteen. In 1822 he became an assistant in Warren Colburn's Boston school and thus presumably came under consideration for the position at East Chelmsford. Besides being an excellent pedagogue Mr. Lewis was, like his friend, the resident agent of the Merrimack company, an enthusiastic student of astronomy. "Many a night when the lazy world was locked in sleep," says Joshua Merrill in his "Reminiscences of Joel Lewis," "Mr. Colburn and he were engaged in their favorite occupation of observing the stars." Mr. Lewis did not teach for long, resigning to enter the employ of the Locks and Canals Company. He was one of the founders of the Middlesex Mechanics' Association, in which he took great interest. He died November 11, 1834. His friend, Warren Colburn, died in September 13, 1834. These two men, with Dr. Edson, share the credit for the establishment of a modern public school system in Lowell. This tribute was paid to Mr. Lewis: "Rarely has it happened to anyone, by a spirit of the truest benevolence, by peculiar charms of social intercourse, and a manifestation of true high moral worth, to leave a deeper impress, not only on the minds of near friends by whom he was beloved, but in those wider circles in which he had his walk in life."

The beginnings of the public school system date, in reality, from the first Lowell town meeting, that of March 6, 1826. Oliver M. Whipple, Warren Colburn, Henry Coburn, Jr., Nathaniel Wright and John Fisher were then appointed a committee to plan for a division of the town into school and highway districts. At the meeting of April 3 following their report was accepted. It provided for creating five school districts with school houses at the following locations: No. 1, site of the present Green school; No. 2, at the corner of Pawtucket



OLD MERRIMACK STREET STATION AND HUNTINGTON HALL.
Site Now Occupied by Y. M. C. A. Building.

and Salem streets, on the grounds now occupied by the Corporation Hospital; No. 3, near the pound; No. 4, near Hale's mills; No. 5, on Central street, just south of Hurd street. The committee appointed to take charge of these educational facilities was: Theodore Edson, Warren Colburn, Samuel Batchelder, John O. Green, Elisha Huntington.

The town's first appropriation on account of the schools was \$1,000.

So many of the operatives were young unmarried people that the schools, it may be assumed, did not at first have quota of pupils proportionate to the population. "One of the districts, No. 3," Dr. Edson recalls, "was very small, not containing more than about 16 pupils. In 1825, the year previous to the incorporation of Lowell, the town of Chelmsford appropriated for schools in this whole region, which was reckoned one district, the sum of \$113.50."

In March, 1827, the number of pupils in the Central street district had grown so fast that district No. 6 on the east side of the street was created.

Reminiscences of the teaching at the school house which, as before stated, stood at the head of Salem street, near where the Corporation Hospital now is, were contributed in May, 1892, at a meeting of the Old Residents' Historical Association by the Rev. Varnum Lincoln, who said: "The school lasted for six or eight weeks in summer and ten or twelve weeks in winter. When I began to go there it was taught by a man named Byam. After this Jefferson Coburn taught the school in winter. In summer he tended bar for his brother, who owned the Merrimack House. Such a mixing of vocations would hardly be tolerated now, but Mr. Coburn didn't instill the same kind of spirits into his pupils that he did into his customers, and was altogether one of the best teachers I ever knew." This dispenser of knowledge and toddy whom Mr. Lincoln thus commended, it may be added, became later the proprietor, successively, of the Franklin House, Lawrence, the Rockingham House, Portsmouth, and the Eastern Exchange, Boston. He died at Lowell in 1871.

Some recollections of an early schoolmaster, by Joshua N. Merrill, read before the Old Residents' Historical Association, give essential facts of school history of Lowell before the district system was abolished:

I went to see the school house where I was to labor for three months, wrote Mr. Merrill. It was a neat little building, standing at the corner of Middlesex and Eliot streets. It had formerly been the Hamilton counting room. Some thirty years ago, when the brick school house was to be erected on the same location, it was removed to the back part of the school yard. After remaining there several years, occupied by a primary school, it was sold and moved on to the

lot next east of the engine house on Middlesex street. An addition has been made to it, and a brick basement, but the outlines of what was the first counting room of the Hamilton Manufacturing Company, the first school house in Lowell, are plainly to be seen.

On Monday, November 5, I commenced my school, with about seventy-five scholars, whose ages ranged from three to twenty years. The second day I received a formal visit from the superintending committee, which in 1827 consisted of Theodore Edson, Warren Colburn and John O. Swan.

During the winter a very serious difficulty originated between the superintending and prudential committees in several of the school districts in regard to the books required to be used in the schools; but fortunately my school was not disturbed in the least. * * * At the close of the three months the committee examined the school and expressed their satisfaction with the progress.

The town appropriation for the schools in 1827 was \$1,000; of this sum \$120 was allotted to this district. More than that had been expended, the balance being paid by the Hamilton company.

A new engagement was now made, as follows: "By order of the Agent of the Hamilton Company, agreed with Joshua Merrill, to teach the school eight weeks, commencing Feb. 4, 1828, for fifty-two dollars including his board. Agreed to keep five and a half days in a week. Attest: I. A. Beard, Clerk." Accordingly I kept eight weeks at the expense of the Hamilton company, the school being under the direction of Mr. Beard, then paymaster of that company.

During the five months I had ninety-one different scholars. Of this number I am not aware that more than four now reside in Lowell, *viz.*: J. G. Peabody, A. D. Puffer, Edwin T. Wilson and Mary T. Beard, the latter a teacher in one of our primary schools since 1844.

At the annual town meeting in March an entire new board or superintending school committee was chosen, consisting of the Rev. Abraham B. Merrill, William Gardner, Jr., Jonathan C. Merrill, John Johnson and Dr. Harlin Pillsbury. None of these gentlemen have served on the committee since, except the Rev. Dr. Merrill, who was elected the next year.

March 29, 1828, a school meeting was held in District No. 5, and Captain Daniel Balch, Captain John Bassett and Mr. David Cook were chosen prudential committee.

April 4, 1828, the committee agreed with me to teach three months, to commence on the first Monday in October, 1828, for \$28 per month, board included. Miss Field taught the school from April 17 to September 27, at \$3.25 per week, board included.

In 1828 the town appropriated \$1,200 for schools; of this District No. 5 received \$150.

As part of the school system the building later occupied by the Free Chapel in Middlesex street was erected by coöperation between the Hamilton and Appleton companies in 1829. Mr. Merrill was moved into that building. His description of its equipment is graphic:

The interior of the new school house was finished under the direction of Mr. Beard, who was an original genius, always inclined to get

up something new; and this time he succeeded admirably. Each seat and desk were made for two scholars. The seats had very high board backs. The scholars were seated with their backs toward the teacher's desk; the reason given was that they could not see the teacher without looking around. When I stood upon the floor I could just see the heads of my largest scholars above the backs of their seats; but to compensate for this the teacher's desk was elevated similarly to the pulpits we sometimes see in the old churches. All the woodwork was painted and sanded with very coarse sand, to prevent the scholars from cutting it. In two or three weeks the sand had made such havoc with the children's clothing that Mr. Beard was glad to make peace with their mothers by rubbing off as much of the sand as possible and repainting. The windows were put very high, so that children could not look out. The heating apparatus, too, I think, must have been original. It was called a furnace. It was built of brick in the southeast corner of the cellar. The chimney, to convey the heat to the school room above, was built on the bottom of the cellar, some forty feet, and then up on one side of the school room. About two feet from the floor an opening six or eight inches square was made, to admit the hot air to warm the room, but it never came. There was always a strong current of air from the school room into the chimney—making an excellent ventilator. After running the stove day and night for some time without effect a wood stove was substituted. Nothing more was said about the furnace.

The Fight for a Modern School System—Five years after the town meeting at which the Lowell school system was inaugurated came a test of the sincerity of Dr. Edson's interest in the cause of popular education—a controversy in which he found himself pitted against the strongest influences that could be brought to bear upon a young and ambitious clergyman. He stood his ground, won his contention before the people and thus was personally responsible for giving Lowell an eminence in public education which has never been lost. Other factors considered, such as wealth per capita and the disadvantages of a polyglot population, no other city in America, it is safe to assert, has had a more laudable record of devotion to the preparation of its young people for their work in the world.

The district school system, which then as now was fairly well adapted to the needs of rural communities, was by 1830 proved to be quite unsuited to a compact, rapidly growing community like Lowell. After some agitation a town meeting appointed a committee of which Dr. Edson was chairman, to propose a better system. At a meeting of April 2, 1832, the committee urged that two modern school houses of the "graded" type be erected.

This proposal to incur expense for good schools at once aroused a storm of opposition to which a weaker character than Dr. Edson must have yielded. As General Butler expresses it in his autobiography: "The taxation of that day for these new grammar schools of

brick would be borne substantially by the manufacturing companies and the Proprietors of the Locks and Canals. Mr. Boott declared that this could not and would not be done." As the project continued to be agitated he presently "informed Mr. Edson that any further advocacy of this proposition would so far meet with his disapprobation that he should withdraw from his church and from attendance upon his ministration; that he should give his attendance and influence to another religious society, and that all support of St. Anne's in any way by the manufacturing companies would be withdrawn."

With that regard for truth and right which distinguished him, Dr. Edson went steadily forward as if he had entertained no such threats. His proposal in its final form came before a town meeting, and won by a majority of eleven votes. A later meeting was called in an effort of the opposition to rescind the resolution. Messrs. Luther Lawrence and John P. Robinson, celebrated lawyers, however, had been retained to speak in opposition. They accomplished so little with the electorate that the majority in favor of making the appropriation of \$20,000 for the new school houses was increased to thirty-eight. It was, in fact, a signal triumph for the clergyman. Some of his parishioners and personal friends, nevertheless, were bad losers, like one by whom he was addressed as he left the hall: "Well, you have got your school houses," was the taunting assertion, "but you will never get the children into them." Dr. Edson recalls that this gentleman later became one of the staunchest friends of the Lowell school system. Kirk Boott withdrew from St. Anne's, but his doing so did not ruin or even sensibly injure the society.

One of the best anecdotes of Dr. Edson's earnestness in this contest to secure a system of graded schools for Lowell was related by Frederic T. Greenhalge at the fiftieth anniversary of the incorporation of the city. The story is as follows: "At a meeting called to take action as to a school system, the imperious Kirk Boott was opposed to the measure, and declared that it was folly to incur any expense on its behalf. Lowell was but an experiment, and a traveler visiting the place in a few years might find only a heap of ruins. Theodore Edson replied that if the traveler examining these ruins found among them no trace of a school house, he would have no difficulty in assigning the cause of the downfall of Lowell. There is logic and wit enough in that retort to have made the reputation of an English prime minister."

On February 23, 1833, the former of the two school houses provided for under the town's appropriation was first opened to pupils. It was known as the South Grammar school, from its location on the South Common. It afterwards was named for the man who had fought pluckily for its inception. It is the Edson school. The North

Grammar school on the North Common was opened a little later. It became known as the Bartlett school, in honor of the city's first mayor. Thousands of boys and girls have had their elementary education within its walls, the Edson school being still in use in 1918; the old Bartlett school lately disused.

Inauguration of the Lowell High School—"The high school contemplated in our present system, and required by law," wrote Dr. Edson, as chairman of the school committee, in his report of 1835, "has been kept only part of the year. Of the sum which, upon the most economical calculation, it was estimated that the schools would cost \$1,000, was not granted by the town, consequently the committee were enabled to sustain the High School only one-half the time, and to employ but one teacher instead of two. The school, being loudly called for by the community, was opened in August, under the care of Mr. Hall. About seventy have attended. The school has been kept full, containing sixty members, and the attendance has been good. Many more are desirous of the privilege of the school and might be admitted if provision were made for their instruction. The school is prosperous, and the committee are happy to commend it to the favor of the town."

Such is the first formal report on one of the most beneficent of Lowell institutions which, since the middle thirties, has offered to studious boys and girls, of whatever family and financial circumstances, free instruction carrying them well beyond the bare rudiments of education. From the outset to the present time it has been a school of which every alumnus should be proud, one marked by the high scholarship and professional devotion of its teachers, and one in which there has always been an admirable *esprit de corps* among the students.

The high school's beginning dates back to December, 1831, when it was opened in a room of the Middlesex street school house, afterwards the Free Chapel, having as teacher Thomas M. Clark, later Episcopal Bishop of Rhode Island.

Among the pupils who entered for that first class in the Lowell high school was a young fellow named "Ben" Butler, who was destined to be heard from later. In speaking of his classmates this youth afterwards wrote in his "Book:—" "There were eight of us in the first class, the classification being made according to apparent advancement in scholarship. The one alphabetically at the head, whose education went no further than in that one school, because afterwards a Boston man in high standing and, later still, a merchant in the State of Vermont. Another fitted for college in the class, became a graduate of Dartmouth, and died young, standing very high in his profession as

a surgeon. Another, whose education was ended there, became a civil engineer of the very highest standing, founded the manufacturing city of Manchester, New Hampshire, and was, for several years, governor of the State. Another, who left the school and became a midshipman in the navy, rose to be of the first class in his profession, and afterwards was the active head of the navy, and only efficient one it had during the War of the Rebellion. Another, going from this class to a medical school, fitted himself for his profession as surgeon, and before his untimely death became one of the most successful and best known surgeons of the country. Two others became reputable and somewhat distinguished citizens. The remaining one is the writer," who was, of course, Major-General Benjamin Franklin Butler.

Efforts to establish separate schools for the children of Irish immigrants began in March, 1831, when a committee composed of Dr. Edson, Rev. E. W. Freeman, Rev. Eliphalet Case, Dr. Elisha Bartlett and Josiah Crosby was appointed by the town "to determine whether it is expedient to establish a school district for the Irish children in Lowell." This committee, at the April meeting, reported as follows:

That a school for the Irish children has been kept about two years. Last year the town voted the sum of \$50 for its support. According to the rule by which the school money is now divided, this, if made a district, would receive \$50. The average number of children attending the school is about thirty. The Irish population is located conveniently to form a district of themselves; therefore, your committee recommend:

That the Irish population living on the Acre so called, be formed into a district, to be called District No. 7. That such Irish families not living within the above limits who, in the opinion of the Superintending School Committee, are conveniently situated, may send to the school in District No. 7.

This arrangement seems not to have given entire satisfaction and after a period of experiment the committee, with the coöperation of the Roman Catholic pastor, the Rev. Father Connolly, authorized the establishment of special schools for Catholics, to be taught only by Catholics and with use of text books satisfactory to adherents of that church. The committee prescribed as conditions of the opening of such schools that: "1. That the instructors must be examined as to their qualifications by the committee and receive their appointments from them; 2. That the books, exercises and studies should all be prescribed and regulated by the committee, and that no other whatever should be taught or allowed; 3. That these schools should be placed as respects the examination, inspection and general supervision of the committee. on precisely the same ground as the other

schools of the town." Three Catholic schools were eventually conducted for a time under this arrangement.

Other municipal departments besides the schools made their start under the town government. One of the most interesting of these, for obvious reasons, was the fire department.

Early Days of the Fire Department—Protection of the town's many wooden buildings from fire was necessarily more or less haphazard in the first years. Just as in smaller places down to this day an alarm of fire drew forth a motley collection of volunteers and small boys. Out from the nearest engine house was drawn the ancient "hand tub." Everybody ran behind it *en route* to the fire. The machine somehow was hitched up to one of the primitive hydrants of the day and a stream from a half-inch hose was played more or less effectually upon the conflagration.

An illuminating account of the primitive system has been contributed by Frank N. Owen, who writes:

In common with the custom observed in the larger towns in the Commonwealth, Lowell had a fire society in those earlier days. It was known as the Lowell United Fire Society, and its members were required to keep hanging in a convenient and accessible place a leather fire bucket for each male member of the household. Upon an alarm of fire they were required to seize the buckets and repair to the fire, where they did service in passing the water. Some of these fire buckets are still preserved in many of the older families of the city. They were elaborately painted and decorated and had the name of the owner painted thereon. Mrs. Ransom Reed, resident on Tyler street, has two buckets in a good state of preservation, marked "Lowell U. F. Society, Ransom Reed, 1828." Secretary Philbrick, of the Veteran Firemen's Association, has in his custody a bucket formerly kept in the house of Jonathan M. Marston, and other families in the city have one or more which are carefully preserved as relics.

At an annual meeting of the town, held in March, 1829, steps were taken for the organization of a fire department, and \$1,000 was voted to equip the same with a fire engine, hose, etc. The firewards were authorized to purchase the engine, and were appointed a committee to consider the subject of forming a fire department.

The firewards made arrangements for the purchase of an engine, etc., and also reported favorably in the matter of forming a fire department. At an adjourned meeting of the town it was voted that the firewards act as a committee "to locate and build an engine house, and to provide places for keeping the ladders, fire hooks, etc." In compliance with this order the firewards voted, at their next meeting: "That the engine house be located on the easterly side of Central street, between the corner of Merrimack street and the Canal Bridge, on the land of the Proprietors of the Locks and Canals Company, where it may remain, rent free, till such time as the said company have occasion to make some other use of the land, when it is to be removed by the town to some other place."

The act formally creating the Lowell Fire Department was passed by the Legislature, February 6, 1830. It was not, however, until some time afterward that active measures were taken to organize a department on an efficient basis. The first fire engine purchased was called the Niagara, and was kept in a house at the corner of Central and Merrimack streets, afterwards being removed to what is now Hosford Square. In 1832, Captain Josiah G. Peabody, Charles Gregg and others organized a fire company, which did efficient service. From this time until 1836 the engineers were as follows: Kirk Boott, 1832; Joseph Tyler, 1833, 1834, 1835; Oliver M. Whipple, from 1835 to 1836. The assistants were: Joseph Tyler, Warren Colburn, 1832; George Brownell, 1832, 1833, 1835; J. M. Dodge, 1832, 1834, 1835; O. M. Whipple, 1833, 1834, 1835; Alvah Mansur, 1833, 1834; Israel Whitney, 1833, 1834; Abiel Abbott, 1833; James Cook, 1833, 1834, 1835; William Wyman, 1833; George Motley, 1835; John Avery, 1833; Jonathan Bowers, 1833, 1834, 1835; Charles L. Tilden, S. A. Coburn, David Dana, Jonathan M. Marston and Alpheus Smith, 1835.

The Coming of the Churches—The commencement of religious services in downtown Lowell and the establishment of St. Anne's Church has been described. As the town acquired a population of prevalingly religious people its churches multiplied and grew prosperous.

The consecration of St. Anne's, as noted, occurred on March 16, 1825. Thence followed parochial activities which belong to the records of the town. The early wardens, with their dates of election, were: Warren Colburn, 1825; Allan Pollock, 1825; Joel Lewis, 1827; John O. Green, 1830; Elisha Huntington, 1833; J. H. B. Ayer, 1833; Robert Means, 1835; George Brownell, 1835. Successive treasurers were Nathaniel Gordon, 1824; Thomas Billings, 1828; Benjamin Mather, 1829; George H. Carleton, 1833. The first three clerks were George B. Pollock, 1824; Joel Lewis, 1828; Daniel Bixby, 1835. The first baptism was that of John Wright, son of Kirk and Anne Boott, March 20, 1825; the first funeral, that of a child of Josiah B. French, January 12, 1827. On August 26, 1826, Joel Lewis offered himself for the first confirmation. On July 17, 1825, James Flood and Harriet Bowers became the church's first bridal pair.

The good Dr. Edson's activities, except his interest in costly educational innovations, as recorded above, were of a sort to justify the expectations entertained of him by the directors of the Merrimack Company. He has told about them at a later date. "My early relations with the Merrimack Corporation," he related at the fiftieth anniversary exercises in 1876, "it having given the church and parsonage, and for the first few years gathered the pew rents for the support of divine worship, as a provision for all the people in their employ,



ST. ANNE'S EPISCOPAL CHURCH.

being it was but right to make the ministrations as generally and as extensively acceptable as might be, gave a very general claim upon my services, and it is but a fair question to ask whether my pastoral labor for the rich and poor, ministering to the sick and afflicted, the dying and the dead, caring for the children and their education, and ready discharge of other ordinary items of ministerial duty, have been such as to justify the original outlay and answer the reasonable expectations of the Merrimack Company."

Concerning the significance of this establishment of St. Anne's Church at East Chelmsford, Bishop William Lawrence dwelt at some length in his sermon at the seventy-fifth anniversary of the church: "Although a majority of the directors of the Merrimack Company were Unitarians, they voted to build an Episcopal Church; and an Episcopal clergyman was called. We can hardly appreciate the significance of that now. Although the Episcopal Church was very little known in Massachusetts outside of Boston, and was not recognized there as a church of reconciliation, yet here, in this city, the Episcopal Church was planted, the only parish for the whole community—the house of worship for Christian people of all names. Here, at the Lord's table knelt the members of many denominations, and at the hands of the pastor received the Sacrament. Here, in unity of spirit and the bond of peace, they prayed in the prayers of their common ancestors of old England. Here they together recited the Apostles' Creed, to which for several generations New England had been a stranger. Thus, until the growth of the population demanded new churches, St. Anne's stood, like a parish church in old England, as the church of the whole people."

Toward the support of St. Anne's every operative on the Merrimack corporation was at first required to spend pay thirty-seven and one-half cents a month.

A story of the rejection by a portion of the population of the religious services that the company at first may have thought to make obligatory upon all, has been told by the Rev. D. C. Eddy, D. D., who said, in an address at the semi-centennial jubilee of the First Baptist church: "After the consecration of the Episcopal church by Bishop Griswold in 1825, the inhabitants of the village made it their religious home, without much declaration of sect or creed. It was doubtless the intention of some of the directors of the Merrimack company, especially of their agent and treasurer, Kirk Boott, to make the place an Episcopal settlement. The operatives were expected to attend service, and the sum necessary to pay for a seat in the sanctuary was regularly deducted from the wages of each. Mr. Boott, with his English education, Episcopal tendencies and military habits, did not readily see how burdensome such taxation must be to a people educated in

New England, and who inherited all the just prejudices of their ancestors against an established church, and a religion supported by the taxation of those who declined to enjoy its benefits. Against such an enforced system of worship old New England has always been vehemently protestant, and when something like it was tried in Lowell, all outside of the Episcopal church were dissenters. Yet until two other churches were formed, the First Baptist and the First Congregational, the latter of which was organized in 1826, a few months after the former had begun its existence, the tax continued, but was at length abandoned, a very strong public opinion expressing itself against it."

There was, as a matter of fact, room for many denominations in the expanding community.

The Baptist church, which made a great many converts in this part of New England about 1820, claims a certain priority even over the Episcopalians, in that meetings addressed by Rev. John Parkhurst, of South Chelmsford, were held in 1822 at the house of Abel Rugg, at the corner of Hosford Square and Wamesit street. Shortly after the Episcopal church occupied St. Anne's the Baptists established a meeting of their own in the vacated school house of the Merrimack company, and early in 1826 definitely organized a religious society, inviting Rev. John Cookson, then of Malden, to become their first pastor. Their meeting house was dedicated November 15, 1826.

The First Congregational Church was founded as a consequence of the gathering together for service of prayer in 1824 at a corporation boarding house of a few men and women who had a preference for the traditional forms of New England orthodoxy. Their society was organized June 26, 1826, with a membership of about fifty persons. In 1827 they dedicated the house of worship on Merrimack street, which down to 1884 was a Lowell landmark. The first pastor was the Rev. George C. Beckwith, who served less than two years. He was succeeded by the Rev. Amos Blanchard, D. D., whose ministry lasted fourteen years.

Roman Catholicism, now so prominent in the religious life of Lowell, had an appropriate field for expansion even in the first days of the town. Mass was celebrated, so far as known for the first time at East Chelmsford, by the Rev. John Mahoney, in 1822. Many Irish workers were already employed in excavating and construction, and some of them had settled in the district called "the Acre," whence so many of the race have risen to honorable and prosperous condition in life. Father Mahoney was the first Roman Catholic pastor to be settled in Lowell. He reported, in 1827, to Bishop Fenwick that "there are twenty-one families and thirty unmarried men settled here." By 1830 the Roman Catholics of the town numbered about four hun-

dred and arrangements were made for the erection of the first church, which was dedicated by Bishop Fenwick on July 3, 1831.

Methodism was very active in the twenties. Its emotive qualities attracted so many of the operatives and others of the new manufacturing town that three Methodist societies were started within a few years of each other. Miss Phebe Higgins is said to have been the first to proclaim Methodism at East Chelmsford. James A. Barnes, in 1824, formed a "class" for religious instruction, out of which grew both the St. Paul's Methodist Church and the Worthen Street Methodist Church. The first Methodist house of worship was that on Chapel Hill, dedicated November 29, 1827. This afterwards became St. Paul's. Rev. Hiram Walden was installed as pastor in the following June. Mr. Walden did not remain long, for on December 14, 1827, he was succeeded by the Rev. A. D. Merrill, who is remembered as a vigorous preacher and strong organizer. He was followed by Rev. Benjamin F. Lombard, July 30, 1828; Rev. Aaron D. Sargent, June 17, 1829, and, on May 27, 1830, by Rev. Ephraim K. Avery.

A Second Methodist Church was formed in 1831, worshipping in a large dwelling house at Lowell and Suffolk streets, and having as its first pastors Rev. George Pickering and Rev. David Kilburn. This society afterwards purchased a brick church on Suffolk street which had been erected by the Baptists. This was where St. Patrick's now stands.

Unitarianism, despite the fact that a majority of the directors of the Merrimack company resident in Boston were Unitarians, did not get a foothold in Lowell until nearly seven years after the new industrial developments were under way. On August 30, 1829, a meeting was called at the home of Thomas Ordway to consider the expediency of organizing a Unitarian society. Next a conference was held at the Old Stone Tavern, at which steps were taken to form the First Unitarian Church. The list of original supporters included the names of several prominent citizens, among them being Judge Seth Ames, John P. Robinson, John Avery, John A. Knowles, Judge Hopkinson, Dr. Elisha Bartlett, Samuel Batchelder and James G. Carney. The first religious exercises were held in the school house of the Appleton and Hamilton companies in Middlesex street, now the Free Chapel, Rev. Caleb Stetson preaching the first sermon. On May 9, 1830, Rev. William Barry came to Lowell to preach and made so favorable an impression that he was given a call. In the following October the church took the name of "The South Congregational Society." The parish then consisted of about sixty families. The first communion service was observed May 1, 1831. On September 17, following, ground was broken for the erection of the present meeting house on Merrimack street, which was dedicated on Christmas day, 1832. Mr.

Barry remained with the Unitarian Church until July, 1835, when he resigned and was succeeded by the Rev. Henry Adolphus Miles, author of the little history of Lowell, published in 1846, to which every one who writes about the early days of the city must confess his debt.

Various institutions of a civilized community were under consideration in the first fruitful years of Lowell. The time was one in which much idealism was prevalent in New England. The new factory town came in for its full share of welfare movements.

The Middlesex Mechanics' Association was incorporated June 18, 1825, in order, as Cowley puts it, "to minister by a library of books, by public lectures and various other means to the intellectual needs of the people." It had as its model the Massachusetts Charitable Mechanics' Association of Salem, founded about thirty years before by Paul Revere. As Hon. Frederick Lawton has described it, it was a "trade guild, with provisions for the mutual support of needy members, the control of apprentices, and the encouragement of good craftsmanship; and limited its membership to mechanics, meaning thereby any persons who had learned a trade." The manufacturing companies, influenced by Kirk Boott, gave this association a lot of land on Dutton street and contributed most of the funds with which its substantial building was erected. As Kengott writes in his "Survey:" "For many years the Middlesex Mechanics' Association wielded a powerful influence in the social, intellectual and moral life of the community. Holyoake would have called it one of the 'sunlight' features in its life of the town and city of Lowell."

✓ **The Pioneer of Lowell Thrift Institutions**—Encouragement of saving among wage earners began in Lowell in March, 1827, when the Merrimack company announced that any of the employees so desirous might allow their wages to stay in the counting room and go on interest at six per cent., payable semi-annually. It was provided that not more than \$100 might be deposited at a time and that the company would not accept more than \$1,000 from any one depositor. This plan was continued until the summer of 1829, when it was discontinued, presumably because a better plan had been originated through the effort of the superintendent of the Hamilton company and some of his associates.

"After one of the Hamilton mills was in operation," wrote Mr. Batchelder, "I found that those in our employ suffered such frequent loss of their money by having in their boarding houses no safe place to keep it, that I allowed them to deposit it with the company on interest, and opened books for the purpose, on the plan of a savings bank. After a time Mr. Nathan Appleton suggested that it might be doubtful whether our charter would authorize this: I

accordingly prepared a petition to the legislature for the incorporation of a savings bank. On receiving the charter I notified a meeting, at my office, of the petitioners and any others who felt an interest in the subject, to take measures for the acceptance of the act of incorporation. According to my recollection there were only Mr. Colburn, Mr. Carney, Mr. Nichols, Mr. Beard and myself. It was suggested that if so little interest was felt in the matter, it was hardly worth while to organize; but Mr. Carney was willing to act as treasurer, and we concluded to appoint ourselves trustees and make the experiment. A few months after this the town of Lowell decided to build a town-house, and wanted to borrow the money for the purpose, which we decided to lend them. The sum, I think, was \$17,000."

Such was the origin of the Lowell Institution for Savings which was incorporated in October, 1829. Other savings institutions followed until the community was unusually well supplied with banks of this type. Reference may here be made in passing to the long and devoted services of Mr. Carney and his descendants, which began under the discouraging conditions just related. Of this model savings bank treasurer Dr. J. O. Green wrote, after his death in 1869: "The record of forty years at the head of our oldest savings institution will not show a single dollar lost of the millions that have passed through Mr. Carney's hands, and not a figure requiring to be changed in nineteen ledgers of nearly 1,000 pages each."

The newspaper is an institution which had its start in pre-Lowell days. At Middlesex Village, June 24, 1824, appeared the first issue of the "Chelmsford Journal." The office of the "Journal" was in a small building situated near the former meeting house at Middlesex. After being issued as the "Journal," it for a time was called the "Chelmsford Phoenix." Then it became the "Middlesex Journal."

Art, Literature and Music in the Township Period—Cultivation of the musical arts began in Lowell with a meeting held September 15, 1824, in the school house of the Merrimack company, at which it was voted to organize a "Sacred Musical Society." This became the Beethoven Musical Society. The officers were: President, Joshua Swan; vice-president, James H. B. Ayer; instrumental master, Abner Ball; first chorister, Edward Sherman; second chorister, Benjamin P. Brown; treasurer, George B. Pollock; secretary, William Goodwin. Nathaniel D. Gould was elected instructor, and Rev. Theodore Edson was elected an honorary member. This society lasted only until September 5, 1827, when it was dissolved, with a vote to give the "balance of the monies" in the treasurer's hands to the "Female Philanthropic Society." Perhaps its most conspicuous performance was that at the consecration of St. Anne's Church, in which exercises it took part "with an orchestra consisting of a double-bass, a violoncello, two clarinets and

two violins." The chorus sang the anthem, "I was glad when they said unto me," and ended with the Handel "Hallelujah Chorus."

The introduction of dramatic entertainments in Lowell occurred in the district school houses, where the children gave occasional performances. There was no theatre in the town. In 1827 a magician gave an exhibition in the Old Yellow House, Belvidere. In 1832 the first company of professional players visited Lowell, utilizing a small hall in the basement of a building at the rear of the First Presbyterian Church, Appleton street. Among the plays they presented were "The Heir at Law," "The Spectre Bridegroom," "The Lottery Ticket," "The Iron Chest" and "A Ghost in Spite of Himself." In 1832 there was formed a Lowell Dramatic Society, with the object of organizing amateur theatricals. Among its members were Philip Stewart, Charles Stanley, George W. Stanley, Phineas Stanley, Henry Wales, John Wellington, Charles Stanwood, Luther Conner, J. Brooks Bradley, Hugh K. Moore, Peter Renton Moore, Martha Moore, Mary Leonard, Mary Eaton, Adeline Bradley, Mary A. Eldridge. The musicians were: Samuel C. Moore, violin; Joseph Nason, flute; Edward B. Howe, violoncello. For the purposes of this society, Concert Hall was fitted up, on the site of the present Pollard store, and for the first performance there was staged "Rudolph, or the Robbers of Calabria." Subsequent dramas enacted by the society were "Pizarro," "Damon and Pythias," "Family Jars," "The Turnpike Gate," "The Boarding House," "The Cork Leg."

Exhibitions of the fine arts were, of course, quite unheard of as yet in Lowell. Even in Boston a sensation was created when a few Italian paintings were publicly exhibited in 1838.

The nearest approach, perhaps, to "high art" which visited the new town was an exhibition of wax figures installed for a time in a building in Central street, in 1835. It was advertised in the newspapers as follows:

16 WAX FIGURES
as Large as Life.

Gibbs and Wansley, the Pirates; the Deputy Marshall; the Dutch Girl; Captain White; Richard Crowninshield; J. F. Knapp and Father; J. J. Knapp and Wife; Mrs. Whipple and Jesse Strang; Siamese Twins, and American Dwarf are now exhibiting for a few days only, at the room adjoining the Mercury Office, and recently occupied as the Citizens' Reading Room, Central Street, Lowell.

There is nothing in the Exhibition to create undue excitement in the most timorous persons. Doors open at half past 1, P. M. and 4, P. M.—Open again at 6 P. M. and remain open till half past seven, but no admittance after seven for the first evening exhibition. Open again for 2d exhibition, same evening at 8 o'clock, and remain open till half past 9. No admittance, however, after 9 o'clock.

No admittance the second time without pay.

The many advertisements in the newspapers of the period of book sales and circulating libraries give a sense of a community in which, though the era of free public libraries was not yet, people read much good literature. The contents of the old "New England Magazine" were regularly advertised each month, and occasionally other periodicals took space.

Circulating libraries, then as now, had their troubles. A searcher after the picturesque in old time advertising pauses with amusement before the black lists which law and custom of the period permitted to be published, to the shaming of delinquent book borrowers. A typical black list was this, printed in the "Lowell Journal" of January 14, 1834:

BLACK LIST.

It is a standing rule of the "Lowell Circulating Library" to advertise the names of all persons, once a year, who have run away with books drawn from said library, or leaving Bills for reading unpaid; also of such as neglect or refuse to return Books, and pay for reading, after having had reasonable notice, personally or by letter. Our regular customers need not have any fears on the subject, as regards themselves, as this is designed to touch only those who regard neither law or morality.

1st. Mrs. Sally Young, formerly of Candia, N. H., kept a boarding house in the Suffolk Corporation, took out a Vol. of Goldsmiths works last August, and decamped down East.

2d. A coloured gentleman, named Franklin Pierce, worked in a respectable Hair dresser's Shop, on Central St., after reading the amount of \$1.00 and paying nothing, took out Vol. 1 "Down Easters" and pretended it was lost and neglected to settle for any part; he's lately decamped for Portland, Me., where he undoubtedly will be a valuable patron of the Circulating Libraries.

3d. Miss Mary Jane Allen, after reading 3 vols. and paying for same, took out Vols. 2 & 3 of "Scottish Chiefs," and that is the last of her custom.

4th. Harrison Barker called and took out "Life of Burns" last Sept., said he worked on the Machine Shop, where it is ascertained there is no such man.

The following persons owe for reading the Library, and have either left town without paying or have neglected to pay after being called on—Eliza Jane Hamilton, Elizabeth Muir, Daniel Lament, C. H. Cluett, Mary Jane Shepherd, Solomon Holmes & some others of smaller amounts.

January 14.

From other advertisements of the time it is noted that the circulating library which thus pilloried its delinquents in the public prints was conducted by Stevens & Company at 18 Central street.

Gay Times at the Old Stone House—Much social gayety centered at the Old Stone House on Pawtucket street, which was built in 1824 by Phineas Whiting, Sr., the material being slaty stone taken from the river bed. It was bought from Mr. Whiting by General Shepard

Leach, of North Chelmsford, and conducted as a hostelry by S. A. Coburn.

Colonel Jefferson Bancroft, who succeeded in the management of the house, was a brother-in-law of Samuel A. Coburn. The last landlord before the house was acquired by Dr. J. C. Ayer for a private residence was George Larrabee, who had been a bartender in the Coburn regime.

Here in the town period of Lowell history were held the famous seasonal balls, known as the "lighting up" and "blow out" balls, occurring respectively on September 21 and March 21. These were the most distinctly democratic social festivities of the year, at which employers and corporation officers danced with factory operatives. Much more select was a series of twelve socials given at the house each winter. In 1836 took place a celebrated ball at which a price of six dollars a ticket was asked and secured.

An old-time dance card of this era gives a sense of the social liveliness of the thirties. It invites to a "Union Ball" to be held in the town hall on January 3, 1833. These were the board of managers: B. Walker, A. Wright, S. Mansur, F. Hobbs, N. Carver, D. Cook, W. N. Smith, A. P. Blake, T. J. Coburn, W. Wright, P. H. Willard, J. Richardson, D. Everett, E. Crane, A. Carlton, J. M. Marston, D. M. Knight, D. Miner, C. Sanderson, T. P. Goodhue. One who attended this ball said in later years that it began at four o'clock in the afternoon and ended at six the next morning. He remembered that "the bakers who carried out bread early in the morning returned with their frocks on and finished out the dancing." The tickets were six dollars each, regarded as a stupendous price in that day and generation.

Beginnings of Anti-Slavery Movement—The agitation against negro slavery, which was destined a generation later to array State against State, reached the town of Lowell shortly before its incorporation as a city. In 1832-33 the New England and American Anti-Slavery societies were formed, and efforts were made, with some success, to interest the New England churches in this moral issue. In the Varnum family at Pawtucketville there was, as we have seen, a persistent tradition of hostility to slavery, so that it is not surprising to discover that in 1834 Deacons Jeremiah Varnum and Oliver P. Varnum took the initiative in calling an anti-slavery meeting at the Pawtucketville church. "During this meeting," writes Atkinson Varnum, "those in attendance contributed five dollars each to be sent to some anti-slavery society, to print tracts and other documents for distribution among the people both North and South. We well remember that one of the above-named gentlemen kept himself well supplied with that kind of literature for a number of years, carrying it in his pockets and at all seasonable times presenting it to such persons as he thought could be made to take an interest in the subject."

Out of the Pawtucketville movement, apparently, came, largely through the initiative of Deacon Samuel B. Simonds, of that church, the first important anti-slavery meeting in downtown Lowell. As an indication of the temper of the time this affair deserves to be described substantially as related by Z. E. Stone in his paper of August 5, 1874, before the Old Residents' Historical Association.

George Thompson, the English philanthropist, who came to the United States to lecture in the autumn of 1834, was secured for a meeting in the town hall, Lowell, on October 4 of that year. On the platform were three of the local clergymen. The meeting passed off without incident, but as reports of what had been said circulated in the town, indignation grew among the reactionary and hoodlum elements of the population. Mr. Thompson returned to Lowell on November 30 by invitation of a board of managers of the anti-slavery movement. He was to lecture on the following Sunday, Monday and Tuesday evenings. At the first meeting his audience was large, and there was no disturbance except that a brick was thrown at the window.

The second evening three missiles were thrown in. One of them, a large brickbat, came through the window with a startling crash and fell upon the floor near where Deacon Simonds was sitting. This brick was laid upon the speaker's desk and carried by him to Boston, where it was suitably inscribed and placed among the archives of the New England Anti-Slavery Society. The third lecture was not given on account of the excitement that was visibly growing. On the preceding morning this placard was posted conspicuously around town:

Citizens of Lowell, arise! Look well to your interests! Will you suffer a question to be discussed in Lowell which will endanger the safety of the Union—a question which we have not by our Constitution any right to meddle with? Fellow-Citizens, shall Lowell be the first place to suffer an Englishman to disturb the peace and harmony of our country? Do you wish instruction from an Englishman? If you are freeborn sons of America, meet, one and all, at the Town Hall, This Evening, at half-past seven o'clock, and convince your Southern brethren that we will not interfere with their rights.

The attitude of most respectable people in Lowell toward the topic of slavery was undoubtedly reflected in resolutions which a meeting of citizens adopted when it was first proposed to permit Mr. Thompson to speak.

The gathering to protest free speech against the "peculiar institution" of the South was called to order by Samuel A. Coburn and J. N. Sumner was chosen secretary. To draft resolutions for immediate submission, a committee was appointed consisting of Thomas Hopkinson, P. H. Willard and John P. Robinson. This committee retired and then very shortly reported the following resolves which were unanimously adopted:

Resolved, That we deeply deplore the existence of Slavery in the United States, and regard it as a blot on the fair reputation of our otherwise free country.

Resolved, That the agitation of the question of immediate emancipation, in this part of the country, is calculated to create suspicions and disaffections between the North and South, and, with no reasonable prospect of effecting any good results, greatly to endanger the permanent union of these States.

Resolved, That in the opinion of this meeting the Town Hall of Lowell ought not to be used for the purpose of presenting a discussion obviously tending to produce effects so much to be deprecated by every well disposed citizen.

The secretary of the meeting was instructed to forward a copy of these resolutions to the selectmen of the town of Lowell.

Permission to hold the meeting was, notwithstanding, granted. Just before the gathering assembled, Mr. Thompson received this anonymous letter:

Rev. Dr. Thompson—Dear Sir, I as a friend beg leave to inform you that there is a plot in agitation to immerce you in a vat of Indelible Ink, and I recommend you to take your departure from this part of the Contra as soon as possible or it will be shurely carried into operation and that to before you see the light of another Son. Very respectfully yours A citizen of theas United States of America.

When the lecturer and his supporters appeared at the hall, they were greeted by "hootings, howlings, hisses, derisive cat-calls, and every infernal noise that an earnest, mischievous, reckless mob is capable of making." As the situation looked menacing it was decided to adjourn the meeting until the following afternoon. Since most of the disturbers were at work during the day, the afternoon meeting was held without especial trouble.

When George Thompson next came to Lowell, in March, 1865, negro slavery was no more in the United States.

Temperance Agitation in the Washingtonian Era—The effort of civilized man to free himself from enslavement to alcohol became sincere and energetic for the first time in occidental history in the early nineteenth century. The temperance movement reached Lowell in 1828. This was two years after the formation of the American Temperance Society in Boston and the establishment of its literary organ, "The National Philanthropist." Prior to this time the use of distilled liquors was practically universal in this corner of Massachusetts as everywhere else in North America. Moderate drinking, indeed, was believed to be beneficial to the health; though as a matter of fact it doubtless would be said by life insurance actuaries of to-day to have been responsible for most of the untimely deaths that the historian of Lowell has to record. Rum was served as a matter of course at

funerals and weddings and when the minister was ordained. It was a pure beverage, as compared with the concoctions of prune juice and raw spirits that to-day pass for whiskey ; but it was deadly strong. "A clergyman, settled in 1818," writes Major Atkinson Varnum, "informs us that at his ordination, among more than twenty ministers present, only one refused to take his grog at the proper time, nor was it deemed inconsistent with Christian character and experience, and it would have been considered a serious breach of etiquette not to have provided it for all in attendance."

Sentiment of that sort among church-going folk, especially among the "dissenting" denominations, was very extensively modified by the pioneer temperance work of such men as Rev. Justin Edwards, of Andover ; Rev. Nathaniel Hewitt, of Fairfield ; Rev. Lyman Beecher, of Litchfield, Connecticut : Rev. Dr. Jeremiah Day, president of Yale College, and others. By 1831 there were in the United States some nineteen State temperance societies, comprising about 3,000 local societies, and with more than 300,000 members.

The first temperance society in Lowell was formed in 1829. At the organization meeting, John A. Knowles served as secretary, and Elisha Glidden was elected its first president. Subsequent presidents were Elisha Huntington, John A. Knowles and William Austin. In the suburbs across the river a Dracut Temperance Society was formed in 1830, Joseph Butterfield Varnum, president. In 1834 the young men of Dracut organized a temperance society, having as officers: President, Timothy V. Coburn ; vice-president, Jesse Clement ; secretary, George W. Coburn ; treasurer, Abel Coburn. This continued to be active for a number of years.

Among the temperance organizations of the neighborhood, an important place was taken by the Lowell Young Men's Temperance Society, which was organized September 15, 1833. Its officers were: President, John W. Graves ; vice-president, Samuel F. Haven ; secretary, L. P. Patch ; treasurer, Moses F. Eaton ; executive committee, Seth Ames, Thomas B. Thayer, Samuel B. Simonds, H. C. Meriam, Charles M. Morrill, Sylvanus Adams, T. P. Saunders, Daniel Bixby, J. W. Mansur, William Hall.

Reminiscences of the crusade against intemperance were also included in a paper of Judge Samuel P. Hadley's childhood recollections of Middlesex Village. "The great temperance movement about 1839 or 1840," he writes, "had in it a very important and, as I regard it, a very beautiful feature, the organization of the children of the country in the 'cold water army,' and the 4th of July was selected as the day on which to make its most imposing demonstrations. Thousands of children, of all ages, dressed in their best, with music, banners, flowers and what was infinitely more beautiful, happy, joyous

faces, moved in long processions through hundreds of New England villages to some shady grove where they heard speeches, sang their songs of the virtues of cold water, partook of a generous collation and returned home, tired but happy."

Visitors' Comments on Lowell—What the outside world thought of the "Spindle City" in its first decade has been recorded in many amusing passages. It became "the thing" for whoever visited New England to make a special trip to Lowell, the industrial show place of the Nation.

The somewhat oriental descriptions which many visitors wrote of the beauties of the community below the falls must undoubtedly be taken with allowance for the grandiloquence of the age.

It remains true, nevertheless, that Lowell as a village was a more attractive place than it has ever been since. American architecture had not yet altogether outgrown the regard for style and good proportions which made our colonial houses and churches one of the finest outflowerings of art in the history of wooden construction. Most of the building that was done at East Chelmsford was plain and utilitarian, but the materials were solid and good and the total effect, as is seen in surviving examples, most have been one of dignity and sobriety. The influence of President Thomas Jefferson, the foremost advocate of a purely classical style of architecture, is unmistakably seen in the manner of many of the more ambitious residences surviving from the twenties, such as the Kirt Boott house, the Nesmith houses in Belvidere, the Tucke house in Centralville. Far in the future still was the succession of nondescript and debased manners, after which in Lowell, as in all American cities, residences were fashioned between, say, 1850 and the present period of partial regeneration.

It is safe, therefore, to conjecture that the appearance of the village of which Kirk Boott was town manager was not altogether unworthy of this panegyric of the editor of the "Essex Gazette," of Salem, who, on August 25, 1825, thus gave in detail his impressions of the place:

As we ascended the high grounds which lie on the side of the Merrimack, the beautiful valley which has been chosen for the site of manufacturing establishments opened upon our view. It is indeed a fairy scene. Here we behold an extensive city, busy, noisy and thriving, with immense prospects of increasing extent and boundless wealth. * * * On the banks of the Merrimack are already three superb factories and two immense piles of brick buildings for calico-printing. In front of these, on the banks of the factory canal which is fenced in and ornamented with a row of elms, are situated the houses of the people. They are handsomely and uniformly painted, with flower gardens in front and separated by wide avenues. There is a beautiful Gothic stone church [St. Anne's] opposite the dwelling houses, and a parsonage of stone is erecting. There is a post office,

fine taverns, one of which is a superb stone edifice, with outbuildings of the same material, and perhaps two hundred houses all fresh from the hands of the workmen. The ground is intersected with fine roads and good bridges. The whole seems like enchantment. About three hundred persons, two-thirds of whom are females, young women from the neighboring towns, are employed. The women earn from a dollar to two dollars a week, according to skill. We stood gazing at this fairy vision at the distance of a mile. The roar of the waterfalls is intermingled with the hum and buzz of the machinery. There seemed to be a song of triumph and exultation at the successful union of nature with the art of man, in order to make her contribute to the wants and happiness of the human family.

One of the first of the many distinguished visitors from abroad who were attracted to Lowell, and whose impressions naturally form a part of any comprehensive story of the city, was Captain Basil Hall, R. N. (1788-1844). This explorer of China, Corea and South America, who was a voluminous writer of travel literature, saw the United States in 1827-28, and in 1829 brought out a volume of impressions whose comments on American manners created considerable stir in this country. His references to Lowell were complimentary. "A few years ago," he wrote, "the spot which we now saw covered with huge cotton mills, canals, roads and bridges, was a mere wilderness, and, if not quite solitary, was inhabited only by painted savages. Under the convoy of a friendly guide, who allowed us to examine not only what we pleased but how we pleased, we investigated the works very carefully. The stuffs manufactured at Lowell, mostly of a coarse description, are woven entirely by power looms, and are intended, I am told, chiefly for home consumption. Everything is paid for by the piece; but the people work only from daylight to dark, having half an hour to breakfast and as long for dinner. The whole discipline, ventilation and other arrangements appeared to be excellent, of which the best proof was the cheerful and healthy look of the girls, all of whom, by the way, were trigged out with much neatness and simplicity, and wore high tortoise shell combs at the back of their heads."

Just before the incorporation as a city, Lowell was inspected by Michel Chevalier, the distinguished French economic writer, whose somewhat impressionistic comment is also worth reproducing:

The town of Lowell dates its origin eleven years ago, and it now contains 15,000 inhabitants, inclusive of the suburb of Belvidere. Twelve years ago it was a barren waste, in which the silence was interrupted only by the murmur of the little river, the Concord, and the noisy dashings of the clear waters of the Merrimack against the granite blocks that suddenly obstruct their course. At present it is a pile of huge factories, each five, six or seven stories high, and capped with a little white belfry which strongly contrasts with the red masonry of the building and is distinctly projected on the dark hills

in the horizon. By the side of these larger structures rise numerous little wooden houses, painted white, with green blinds, very neat, very snug, very nicely carpeted, and with a few small trees around them, or brick houses in the English style, that is to say, simple and tasteful without and comfortable within; one side, fancy goods shops and milliners' rooms without number, for the women are the majority in Lowell; and vast hotels in the American style, very much like barracks (the only barracks in Lowell); on another, canals, water-wheels, water-falls, bridges, banks, schools and libraries, for in Lowell reading is the only recreation, and there are no less than seven journals published there. All around are churches and meeting houses of every sect, Episcopalian, Baptist, Congregationalist, Methodist, Universalist, Unitarian, etc., and there is also a Roman Catholic chapel. Here are all the edifices of a flourishing town of the Old World, except the prisons, hospitals and theatres; everywhere is heard the noise of hammers, of spindles, of bells calling the hands to work or dismissing them from their tasks, of coaches and six arriving or starting off, of the blowing of rocks to make a mill-race or to level a road; it is the peaceful hum of an industrious population whose movements are regulated like clockwork; a population not native to the town, and one-half of which at least will die elsewhere, after having aided in founding three or four other towns; for the full-blooded American has this in common with the Tartar, that he is encamped, not established, on the soil he treads upon.

One of the most celebrated of American tourists was President Andrew Jackson, who was in Lowell, June 26-27, 1833. His welcome was most cordial. The striking feature of the parade arranged in his honor, was one of 2,500 mill girls, all tastefully clad.

The Kentucky statesman Henry Clay looked over the Lowell plants in October, 1833, and was given a reception hardly less splendid than that accorded to President Jackson.

On May 7, 1834, came Congressman David Crockett, of Tennessee, whose description follows: "I had heard so much of Lowell that I longed to see it. I wanted to see the power of machinery wielded by the keenest calculations of human skill. We went down among the factories. The dinner bells were ringing and the folks were pouring out of the houses like bees out of a gum. I looked at them as they passed, all well dressed, lively and genteel in their appearance. I went in among the girls and talked with many of them. Not one of them expressed herself as tired of her employment. Some were very handsome. I could not help reflecting on the difference of condition between these females, thus employed, and that of other populous countries where the female character is degraded to abject slavery."

Black Coal Follows "White Coal"—An industrial episode with amusing features was the introduction of coal as a fuel, which took place through the enterprise of William Kittredge (1810-1886), born in Newburyport and reared on a Dracut farm. Mr. Kittredge at fif-

teen began to learn the blacksmith's trade with his older brother, J. G. Kittredge. Presently the two brothers were conducting a combined hardware store, wood yard and blacksmith shop. In 1828, while shoeing a horse for Lawyer S. H. Mann, he was told of the arrival at Salem of certain "black rocks" from Pennsylvania which would burn. Mr. Kittredge's curiosity was aroused and he arranged with somebody in Salem to buy two tons of coal at twenty dollars a ton. The coal was brought inland in a baggage wagon at four dollars a ton for transportation. In Mr. Mann's office an attempt was made to burn the "rocks" in an open grate. The experiment at first was a failure. Then some one suggested breaking the stuff into smaller pieces. About two bushels were so treated and these pieces, when placed upon a roaring wood fire, at once began to glow. As the fire grew hot the paint on the woodwork started to blister and some one turned in an alarm of fire. Water was poured upon the coals, but still the blaze continued. Finally it was put out and one of the great excitements of the town of Lowell was over. Soon thereafter a boatload of coal consigned to Mr. Kittredge arrived from Boston. It came over the Middlesex canal; this first load is said to have lasted the town nearly three years. In 1835 Mr. Kittredge received the first load ever brought by rail over the Boston & Lowell railroad.

Until the building of Central bridge, Bradley's Ferry continued to be a chief means of connecting the new village with the eastern section of Dracut and the New Hampshire towns to the north. On what is now the Centralville side of the river was a tavern on the further side of First street, and with stables on Second street, which was the terminus of quite an extensive stage traffic. During Jackson's administration, Josiah B. French had a contract for the mails of a whole tier of townships in Southern New Hampshire and from the stables in Second street his vehicles went forth over what is now Bridge street through Dracut Centre to Pelham and beyond. Arrived at Centralville, mails and passengers were ferried across the river.

The Coming of the Railroad—The "era of internal improvements," as the 1830 period has been called, put Lowell, to use a modern phrase, "on the world's railroad map." George Stephenson's invention of the "iron horse" had been hailed almost ecstatically in this country, as solving problems of transportation which the canals, frozen over during several months of the year, left untouched. By 1830 some twenty-four railroad lines varying in length from five to three hundred miles had been projected in the United States, and several of the shorter ones were in operation. Among the pioneer projects was the Boston & Lowell railroad.

This enterprise, monumentally important, of course, to the growth of an industrial city, was not put through without opposition. When

in 1829 a petition was presented to the Legislature to incorporate a railroad between Boston and Lowell, a committee of the directors of the already established water route, consisting of William Sullivan, Joseph Coolidge and George Hallett, at once offered a "Remonstrance of the Proprietors of Middlesex Canal against the Grant of a Charter to build a Railroad from Boston to Lowell." As part of their argument the protestants delivered themselves as follows: "It is believed that no safer or cheaper mode of conveyance can be established [than the Middlesex Canal], or any so well adapted for conveying heavy and bulky articles. To establish, therefore, a substitute for the canal alongside of it, and for the whole distance, and in many places within a few rods of it, and to do that which the canal was made to do, seems to be a measure not called for by any exigency, nor one which the Legislature can permit, without implicitly declaring that all investments of money in public enterprises must be subject to the will of any applicants who think that they may justly benefit themselves, and that they may do it without regard to older enterprises, which have a claim to protection from public authority. With regard, then, to transportation of tonnage goods, the means exist for all but the winter months as effectually as any that can be provided. There is a supposed source of revenue to a railroad from carrying passengers. As to this the remonstrants venture no opinion, except to say that passengers are now carried, at all hours, as rapidly and safely as they are anywhere else in the world; and if the usual time consumed in passing from one place to the other be three hours, there seems not to be any such exigency to make that space of time one-half of what it now is, as to justify the establishment of a railroad for that purpose merely, if the establishment would, as it is thought it must, draw after it eventually all other transportation. To this the remonstrants would add that the use of a railroad for passengers only has been tested by experience nowhere hitherto, and that it remains to be known whether this is a mode which will command general confidence and approbation, and that, therefore, no facts are now before the public which furnish the conclusion that the grant of a railroad is a public exigency, even for such a purpose. The remonstrants would also add that so far as they know there can never be a sufficient inducement to extend a railroad westwardly and northwestwardly to the Connecticut, as to make it the great avenue to and from the interior, but that its termination must be at Lowell and, consequently, that it is to be a substitute for the modes of transportation now in use and cannot deserve patronage from the supposition that it is to be more extensively useful."

The contention of these remonstrants was supported in the Legislature by so cogent an argument as that of Representative Cogswell, of Ipswich, who averred that: "Railways, Mr. Speaker, may do well

enough in the old countries, but will never be the thing for so young a country as this."

Despite such antagonism from vested interests, the plan that was proposed by Patrick Tracy Jackson and others of the group of capitalists who had founded Lowell was finally authorized by the General Court, and work was begun upon what is now the main line of the Boston & Maine system, southern division. The first locomotive ran over the road, May 27, 1835. This was a trial trip, the train consisting of the locomotive and a single car, carrying a few passengers. The running time was one hour, seventeen minutes.

A newspaper paragraph regarding the success of the Boston & Lowell railroad stated on October 16, 1835: "This road has been in use since the middle of June last, and every business man in town has felt the convenience of it. No official statement of the amount of receipts has been given: but we are informed that up to the first day of the present month the number of passengers both ways was within a fraction of 50,000, a little less than 4,000 a week."

Some unusually valuable details regarding this pioneer transportation enterprise were given in a paper on "Early Days of Railroad-ing in Lowell," by Herbert C. Taft, read March 2, 1909, before the Lowell Historical Association.

Prior to the opening of the Boston and Lowell railroad, according to Mr. Taft, an average of forty-five stages arrived and departed daily at Lowell, employing from 250 to 300 horses. Rather more than half these stages made the journey back and forth to Boston. The freight rates to that city were from \$2.50 to \$4.00 per ton. Passengers were carried at \$1.25 each.

The promoters of the new railroad estimated that the line would yield them from its carriage of merchandise about \$30,434 annually, and that the gross receipts from passengers would be \$28,089, giving a total revenue or gross revenue of \$58,523. This was a sufficient inducement to interest some of the capitalists of the day. It was estimated that the cost of making the railroad would be \$400,000. To be sure of not running short, a total capital of \$600,000 was raised. The construction was very substantial and solid—in some respects needlessly so, as when the rails were bolted to stone sleepers, costly to cut and to handle. The cost of the line aggregated about \$60,000 a mile.

The payroll of the road at its inception would cause the soul of a modern railroad president to rejoice. A superintendent was employed at a salary of \$1,500; a clerk at \$500. In each city there were two clerks and two warehousemen whose wages totaled \$1,500. Two engineers were engaged at two dollars a day each, and two tenders at one dollar a day. The whole salary list amounted to only \$5,372 a per annum.

A proud day for Patrick Tracy Jackson was Wednesday, May 17, 1835, when the first run was made over the completed railway between the two cities. The engine, appropriately named the "Stephenson," was one that had been built by the Robert Stephenson Company of Newcastle-upon-Tyne. It was brought to this country in sections, which upon their arrival were placed in a canal boat and brought over the Middlesex canal, whose usefulness this very shipment was soon to destroy. Why the engine should have been run from Lowell to Boston has been variously conjectured. Possibly the explanation is that mechanics capable of assembling it and looking it over before the start were surest to be found in the manufacturing town. The departure, at any rate, was made from the northern terminus. The passengers were Mr. Jackson, agent of the company during the construction; George W. Whistler, chief engineer of the Locks and Canals Company; James F. Baldwin, the civil engineer who made the railroad. The run to Boston was accomplished in one hour and seventeen minutes. The return trip, with twenty-four passengers aboard, required one hour and forty minutes.

After this experimental trip various details evidently had to be completed, for the service was not opened to the public until June 24 following.

Concerning the running of the first trains out of Lowell, Mr. Taft recalls that the original conductor was John Barrett, a native New Englander. The original engineer, who merited the adjective in both senses of the word, was William Robinson, a Briton, who had been imported for this special work. Robinson took a quite lofty view of his own indispensableness, and readily undertook to play upon the credulity of the ignorant natives. "He was not very particular about train time, would saunter up to the depot about an hour after his train was due to start, carelessly look around upon the waiting passengers, look over his engine, mount the platform, put on his kid gloves and in his own good time and pleasure, start his train toward Boston. He would also stop his train suddenly when he got nearly to a station, jump down, look the engine over anxiously, crawl under it, remove a nut from some bolt, look it over and put it back again. The next day the papers would have an account of how the engine had broken down on its way, but had been skillfully repaired by Engineer Robinson. It was not long, however, before the management caught on, and he was replaced by a skilled mechanic from the Locks and Canals Locomotive Works, from which source the engineers required were obtained for many years."

What the Baldwin Locomotive Works are to American railroad-ing to-day, the Locks and Canals Works, later the Lowell Machine Shop, was to the transportation system before the war. The readi-

ness with which some of General Butler's men repaired a locomotive in the first days of the Civil War was not surprising, as they had been trained in a shop which for a long time had engine building as one of its specialties.

The first locomotive to be built at Lowell was placed upon the rails, June 30, 1835. No longer was the railroad dependent upon English machine shops. The naming of this engine created something of a local commotion. In compliment to Patrick Tracy Jackson, it was proposed to call the new locomotive "The Jackson." It happened, however, that at the moment feeling among Lowell Whigs against General Andrew Jackson ran very high, and strenuous objection to this naming were registered. As a compromise the management of the machine shop called the engine "The Patrick." A second one was finished four days later and was christened "The Lowell." This locomotive was the first to be devoted exclusively to freight hauling.

The first ticket agent at the Merrimack street station was a Mr. Long. His honesty was evidently never in question, for his opportunities for collusion with himself seem to have been unlimited. The system was such, the tradition goes, that he sold the tickets at the station and then went aboard the train just before it started, to collect them. The railroad had been chartered to carry passengers to Boston for seventy-five cents; the management at once set a price of one dollar. To live within the law, however, one car on each train was run at the legal price. This was a rude open box car with a few rough pine seats. People who possibly could afford to pay the additional twenty-five cents never rode in the second-class car.

The present elaborate classification of freight rates was still to be invented. A flat price of \$1.25 for 2,000 pounds between Lowell and Boston was charged. In carload lots one got a rate of \$1.10.

The first station to be used in Boston was that on Lowell street. In 1857 the company erected a depot on the present site in Causeway street.

Concerning this inauguration of railroad service between Lowell and Boston, Mrs. Robinson says, in "Loom and Spindle:" "I saw the first train that went out of Lowell, and there was great excitement over the event. People were gathered along the street near the 'deepot,' discussing the great wonder; and we children stayed at home from school, or ran barefooted from our play, at the first toot of the whistle. As I stood on the sidewalk I remember hearing those who stood near me disputing as to the probable result of this new attempt at locomotion. 'The ingine never can start all them cars.' 'She can, too.' 'She cant. I don't believe a word of it.' 'She'll break down and kill everybody,' was the cry."

CHAPTER IX.

Lowell, the Ante-Bellum City.

"To consider if any alterations or modifications in the municipal regulations of said town are necessary, and if so, the expediency of establishing a city government" was the object of the appointment of a committee of twenty-five citizens of the town of Lowell on February 3, 1836.

A town meeting had reached the conclusion that the time might be at hand for adopting a form of government to which Boston had already attained and for which Salem had just received authorization. This committee consisted of Luther Lawrence, chairman; Erastus Douglas, Granville Parker, Eliphalet Case, Walter Willey, John Nesmith, Thomas P. Goodhue, Oliver M. Whipple, Isaac Swan, William Austin, Thomas Flint, Joseph W. Mansur, Richard Fowler, Seth Ames, Daniel H. Dean, Joel Stone, Jr., Henry L. Baxter, Hamlin Davis, I. M. Doe, John R. Adams, John Aiken, John Chase, George Brownell, William N. Owen.

Thus was inaugurated a movement toward making a modern municipality of the manufacturing village on the Merrimack. The form of government which, it was almost a foregone conclusion, the citizens' committee would recommend, was that under which most readers of this work have lived. It was based on the familiar American combination of popular representation and divided responsibility. The defects of the system became so apparent to a later generation that in Lowell, as in many other municipalities, an attempt has been made to centralize authority in a single commission. In its first years at least, the administration of civic affairs of New England communities, through a mayor, board of aldermen and common council, indicated no breakdown in the theory of popular self-government. Under the municipal government, and often through its initiative, were developed institutions of public use and enjoyment such as have made the modern city, for all its drawbacks, a better place for most people to work in and to live in than the rural communities by which it is surrounded. The advantages of the city are often minimized by residents to whom the defects are annoyingly evident and who are victims of the "golden age" delusion, perpetually looking back to earlier and more primitive conditions with a will to believe those better than the present circumstances. Neither politically nor economically has the development of Lowell since 1836 been ideal. Improvements have been wrought with difficulty; in some departments of the common life there has been retrogression. Yet it was a good city that was

founded at the junction of the rivers a quarter of a century before the Civil War, and a good city it has remained. From the days of Theodore Edson and Elisha Bartlett onward it has been a privilege to be born and reared in such a community as Lowell.

Events moved rapidly after the question of becoming a city was broached by the townspeople. An adjourned meeting was held on February 17, 1836, at which the foregoing committee submitted a report which was accepted and adopted. It read as follows:

The committee appointed "to consider and report if any modifications or alterations in the municipal regulations of the town are necessary, and if so, the expediency of establishing a city government," and of petitioning the Legislature at their present session for a charter for that purpose, have had the same under consideration, and now ask leave to report.

Our New England ancestors, among their first acts after their arrival in this country, marked out and divided such portions of their wilderness into towns as they chose to improve and possess for their government. Those laws were characterized very strongly by their peculiar manners and habits of the age, and were skillfully adapted to the resolute and self-denying spirit of their authors.

Many of those statutes are now in form with little or no alteration. Such were the spirit and principles of most of them that they are suited to all men in every condition of life, who cherish a love of civil and religious liberty and a determination to maintain and enjoy free and equal rights. Much and most of what is now or ever has been estimable in the New England manners and character may be ascribed to the influence of our municipal regulations. Religious worship, free schools, the care of the poor and the highways, were the principal objects of early legislation for towns.

The first has ceased to be under the care of the town; the others, with the preservation of the health of the people, are now the great and engrossing objects over which towns extend their care. The existing laws are well adapted to the wants of towns of a small or moderate size in point of numbers, but have been found insufficient for the efficient regulation of those that have a large population.

Special legislation has been resorted to, in many instances, for large towns, but in most cases, when their numbers were not sufficient to entitle them to a city government. The principal defects in the operation of the present system of laws as it respects large towns, and especially Lowell, are the want of executive power and the loose and irresponsible manner in which money is granted and expended for municipal purposes. It is believed to be impossible to provide a remedy for these defects in the town under the present system. Such a modification of the laws is necessary that the power of granting and expending money and of executing the laws be so concentrated that direct and well defined responsibility to the people may be imposed on those who have the administration of the public affairs. Having thus expressed an opinion on the first proposition submitted, your committee now proceed to consider the second, to wit, the expediency of establishing a city government. This last proposition presents a grave question, that of changing the frame and form of our municipal gov-

ernment, with which are identified much of our prosperity and happiness. In deciding this question it is necessary to keep constantly before the mind the number of our inhabitants, their dissimilar habits, manners and pursuits, the rapid and progressive increase of our population, the variety of interest and the constant changes which are taking place. It is certain that some change is necessary in our present system to preserve health and to live in peace and security. Such a government as the well-being and prosperity of the town require, in the opinion of your committee, cannot in any way be so easily attained as in the establishment of a city government. The town may continue a few years under the present system, but the time is near at hand when there must be a change and a city government or something similar must be adopted.

The difference in the expense of the present system and a city government will necessarily be from one to two thousand dollars annually, and it may be less after the new government is put into operation; much, however, in that respect must depend on the provisions in the charter of the new government and the administration under it. The charter should, as much as possible, restrain and guard against extravagance, and should grant to those entrusted with power no more patronage than is absolutely necessary for the prompt and forceful execution of the laws. Finally, your committee are of opinion that it is expedient to establish a city government, and that the town petition the Legislature now in session to grant a charter for that purpose. And they beg leave to report the resolves below for that purpose, all of which is submitted. Per order,

LUTHER LAWRENCE,
Chairman.

Resolved, That it is expedient that the Town of Lowell become a city, and that the Selectmen of Lowell be a committee to draft a petition and present the same to the legislature now in session, to grant a charter to make said town a city, and establish a city government therein.

A further resolve was:

Resolved, That Luther Lawrence, Eliphalet Case, John Nesmith, Oliver M. Whipple, William Austin, Joseph W. Mansur, Seth Ames, Joel Stone, Jr., Amos Spalding, Hamlin Davis, John R. Adams, John Chase, William N. Owen, Erastus Douglass, Granville Parker, Walter Willey, Thomas P. Goodhue, Isaac Swan, Thomas Flint, Richard Fowler, Daniel H. Dean, Henry I. Baxter, J. M. Doe, John Aiken, George Brownell, Joseph Locke, David Boynton, Tappan Wentworth, John Mixer, Peter H. Willard, Benjamin Walker, Samuel A. Coburn, Thomas Hopkinson, Benjamin Hutchinson, and Thomas A. Comins be a committee to draft a charter for the purpose aforesaid and present the same to the said town as soon as may be for their consideration and approval.

The act by which the General Court incorporated the city of Lowell was signed by Governor Edward Everett on April 1, 1836, subject to a referendum of the voters of the town. This latter was held April 11, 1836. The vote resulted as follows:

Whole number of votes.....	1,289
Yeas	961
Nays	328

The outcome of the first election for officers of the new city was: Mayor, Elisha Bartlett. Aldermen: William Austin, resigned October 10; Joseph Tapley, elected in November; Benjamin Walker, Oliver M. Whipple, Seth Ames, Alexander Wright, Aaron Mansur. City clerk: Samuel A. Coburn. Common council: John Clark, president; Stephen Mansur, Henry J. Baxter, John Mixer, Jonathan Bowers, Thomas Nesmith, George Brownell, David Nourse, James Cook, Thomas Ordway, David Dana, James Russell, Erastus Douglas, John A. Savels, Josiah B. French, Sidney Spalding, Cyril French, Weld Spalding, Samuel Garland, Jonathan Tyler, Horatio W. Hastings, Tappan Wentworth, Horace Howard, William Wyman. George Woodward, clerk, died. Albert Locke elected.

Thus, under favoring auspices, began the experiment of municipal government which, in this chapter, is described in outline down to the outbreak of the war between the American States. It must not be supposed that the first election and the subsequent municipal elections were free from popular furore and partisan bitterness. The middle decades of the nineteenth century were marked throughout the United States by political exuberance.

The first municipal election in Lowell, which was characteristic of many more to follow, was thus described by Charles Cawley some twenty years after the event:

The canvass preceding the election of the first mayor was distinguished by extraordinary excitement. An eye-witness—Dr. Huntington, in his recently published address before the Middlesex North District Medical Society on the life and character of Dr. Bartlett—well observed that “political parties were nearly equally divided, and political feeling was at fever heat. Each party was desirous of the honor of inaugurating the young municipality.” Each party nominated its most available candidate. The Whigs concentrated their strength on Dr. Elisha Bartlett; and, with his name inscribed upon their banner, they felt strong and well grounded assurance of victory. The unterrified democracy, nothing alarmed by the action of their Whig friends, nominated Eliphalet Case, Esquire, and determined to elect him whether he received the requisite number of votes or not. Mr. Case had been the first pastor of the first Universalist Church, but had ceased to beat “the drum ecclesiastic,” and had addicted himself con amore to the desperate game of politics. He was the most adroit political manager that had appeared in these regions since the days of that other ex-priest, the Indian sachem, Passaconaway.

Once the contest had been settled, neighbors, of course of opposing political faiths, settled down to their peaceful vocations and avocations. The electorate had chosen an able and honest chief executive.

it did nothing less in the subsequent years. Of the succession of mayors in the first two decades Cowley says: "Our mayors have been solid but not brilliant men—honestly, judiciously and quietly discharging their magisterial functions, but making little display and employing no trumpeters to proclaim abroad their fame. No charge of corruption, speculation or official misconduct has ever been seriously alleged against any of them. Once or twice disturbances have occurred and the riot act has been read; but otherwise no striking events have transpired in connection with our municipal administrations."

The political history of the city from the incorporation onward is not easy to trace in detail. There were numerous currents and cross currents. The community at the outset was normally safe for the Whigs on National and State issues, if only the Whig party had been united against the Democrats. Inter-party feuds, however, were reflected in the voting population of a city as alive to considerations of State and National politics as Lowell then was. The situation was further mixed by the perpetual local issue of "corporation" and "anti-corporation." Many citizens, including not a few of the representatives of families who were on the ground before the manufacturing companies came to East Chelmsford, were resentful of any and all attempts of the corporation agents to "steer the city government." This issue, in one form and another, was continually appearing.

The mayors of the early years were, as Cowley has noted, without exception high-grade men. Even a sketchy account of their personnel shows that under municipal government the voters, however divided in party allegiance, did not fall under the influence of tricksters or demagogues.

Lowell's Earliest Mayors—The first of the ante-bellum mayors, as already stated, was Dr. Elisha Bartlett, M. D., born at Smithfield, Rhode Island, October 6, 1804, and trained at the Brown University Medical School and by a year of hospital study in Europe. Dr. Bartlett moved to Lowell as a young man to practice his profession and quickly became a very popular citizen. He was reëlected to the mayoralty in 1837. The Bartlett School was named in his honor. Never a robust man—like many of the leading spirits of Lowell in the tubercular decades—he presently became a chronic invalid. He removed to his former home at Smithfield and died there in 1855.

Luther Lawrence, the second mayor, was of the Lawrences of Groton, where he was born September 28, 1778. He was graduated from Harvard College in 1801. After successfully practicing law in Groton he removed in 1831 to Lowell. During his second term he was killed, April 17, 1839, by accidentally stepping into a penstock.

A very distinguished citizen was Dr. Elisha Huntington, the third mayor of Lowell, whose years of service in this office were 1840-41-44-

45-52-56-58 and part of 1859. In his honor Huntington Hall was named. His descendants have further enhanced the reputation of the great name which he established.

Dr. Huntington was born at Topsfield in 1796, a son of the Rev. Asahel Huntington, for twenty-five years a minister in that town. He was graduated from Dartmouth College in 1815. After completing his medical education he came to Lowell in 1824 to practice his profession. His public service began in 1833 when he was elected to the board of selectmen. Under the new city charter he was in the common councils of 1837-38-39, serving as president for two years. Besides being mayor as stated, he was in the board of aldermen in 1847-53-54. He was consulting physician of the Tewksbury almshouse from the time of its foundation until he died, December 13, 1865. In 1863 he was Lieutenant-Governor of Massachusetts. At the time of his death he was senior warden of St. John's Episcopal Church, Lowell. His wife was Hannah, daughter of Joseph and Deborah Hinckley, of Marblehead. Their sons were Major I. F. Huntington, of Boston, and Rev. William R. Huntington, D. D., for many years rector of Grace Church, New York City; a daughter was Mrs. Josiah Parsons Cooke, of Cambridge, wife of the professor of chemistry at Harvard University.

Nathaniel Wright defeated Dr. Huntington in the mayoralty contest of 1842, running as a Whig of anti-corporation affiliations. He was born at Sterling, February 13, 1785, was graduated from Harvard College and was admitted to the bar in 1811. He is remembered as an excellent lawyer and an honest, able administrator, a man of few words and averse to display and ostentation. He died on November 5, 1858.

In 1826 Lowell elected Colonel Jefferson Bancroft mayor. He was twice reelected in successive years. This admirable citizen was born at Warwick in 1803, of a family that has had many eminent members since it was founded in this country by Lieutenant Thomas Bancroft, born in England in 1822. In 1824 Jefferson Bancroft came to East Chelmsford from Boston *via* the packet boat on the Middlesex canal and secured work as a factory operative. Within a few years he had become an overseer for carding on the Appleton. In 1826 he married Harriet, daughter of Amos Bradley, M. D., of Dracut. In June, 1831, he began a long service as deputy sheriff of Middlesex county, an office which he held until 1890, with the exception of the years 1853-60. In the last two years of the town of Lowell he was collector of taxes. In 1840-41 he was in the common council and in 1842-43 in the board of aldermen. Between 1844 and 1846 he was chief engineer of the fire department. He twice represented Lowell in the Legislature and held various other positions of responsibility. In 1836 he was chosen adjutant of the Fifth Regiment, Massachusetts

Volunteer Militia, and was afterwards its colonel. The community had no more useful member than Colonel Bancroft and none more universally respected. He died at Tyngsborough, January 3, 1890.

On the "Citizens' ticket" Josiah Bowers French was chosen mayor of the city in 1849-50. The community thus secured the services of an able and far-seeing financier who was responsible for the upbuilding of several important enterprises. Mr. French came in 1824 to East Chelmsford from Billerica, where he was born December 13, 1799. He had just been appointed deputy sheriff of Middlesex county, an office which he held until 1830. He was in the common councils of 1836 and 1842; was in the Legislatures of 1835 and 1861; was chief of the fire department in 1840-41, and from 1844 to 1847 was one of the county commissioners. His business connections were many. He was one of the promoters of the Central Bridge Company, with which he was associated until the property was taken over by the city. Between 1831 and 1846 he managed stage-coach lines plying between Lowell and Concord, New Hampshire, and other northern points. He was active in securing the establishment of the Lowell and Appleton National banks and the City Institution for Savings. For a time he was president of the Appleton Bank. In 1851 he was elected president of the Northern New Hampshire railroad. With his brother, Captain Walter French, he built a railroad in Ohio. For fourteen years he was agent of the Winnipiseogee Lake Cotton and Woolen Manufacturing Company. In politics he was a Democrat; in religion a Unitarian, and in every respect a born leader of men. It is recalled that "he was a man of fine personal bearing—tall, erect and commanding—giving the impression to one who met him that he was no ordinary man." He died August 21, 1876.

James H. B. Ayer, born at Haverhill in 1788, was elected mayor in 1850. He came to East Chelmsford in 1823 to take a position with the Locks and Canals Company. He was thus employed until 1846, when he went into the lumber business in partnership with Horatio Fletcher. Shortly after the period of his mayoralty he returned to the Locks and Canals Company as paymaster. He died June 7, 1864, remembered as a man of high personal integrity and good business ability.

Sewell G. Mack, born at Wilton, New Hampshire, November 8, 1813, was mayor in 1853-54, a representative of the fine Scotch-Irish stock that settled several townships of Southern New Hampshire. His youth and early manhood were passed at Amherst, New Hampshire, from which town he was sent as delegate to the National Convention at Baltimore that nominated William Henry Harrison for the presidency. In 1840 he came to Lowell to take up the business of a brother who had just died. The firm of Cushing & Mack, later S. G.

Mack & Company, was a business landmark down to 1887. Mr. Mack was closely associated with many enterprises of public service and business. He and John Wright became interested in gas lighting and organized the Lowell Gas Light Company, of which Mr. Mack was president for many years. In 1842 he was chosen a director of the Railroad Bank. Later he became president of the Five Cent Savings Bank. From its incorporation he was a director of the Stony Brook railroad. He was one of the incorporators of the Old Ladies' Home, a director in the Lowell Dispensary and for some years the "citizens' trustee" of the Corporation Hospital. Besides serving as mayor he was at various times a councilman, alderman, school committeeman and representative in the Legislature. For fifty years he was a deacon of Kirk Street Congregational Church, of which he was one of the founders.

Ambrose Lawrence became mayor in 1855. Coming from the same emigrant ancestor with the Lawrences of Groton, he was born at Boscawen, New Hampshire, in 1816. At twenty-one he took a position as machinist in the Suffolk Manufacturing Company. Three years later he entered upon the study of dentistry, for which he had natural capacity. His office from 1839 onward was near the old postoffice. He prospered in his profession, in which he became a recognized expert, at one time holding a dental professorship in Boston. His fine residence in John street, built in 1852, later became the Home for Young Women and Children. Dr. Lawrence was much interested in problems of local government. He entered the common council in 1849 and the board of aldermen in 1851. He died in 1893.

Stephen Mansur, who was mayor in 1857, was born at Temple, New Hampshire, August 25, 1799. As already related, he came to Lowell through his special knowledge of canal construction, as he had served on the Erie canal. He represented the city in the Legislatures of 1836 and 1850. He was in the city council in 1836 and 1839, and in the board of aldermen in 1840, 1847, and 1853. He was appointed one of the inspectors of the Tewksbury Almshouse, when that institution was created in 1853. He attended the First Baptist Church, of which he was long a deacon.

James Cook, mayor of Lowell in 1859, was born at Preston, Connecticut, October 4, 1794. He learned the clothier's trade in his father's fulling mill. In 1830 he came to Lowell as agent of the Middlesex company. Under his direction this company became remarkably successful, paying dividends as high as thirty-three per cent. Mr. Cook was subsequently agent of the Winooski Mills, at Burlington, Vermont, and the Uncas Mills, of Norwich, Connecticut. After he returned to Lowell he engaged in the insurance business. He was twice a member of the common council and was elected to the mayoralty by the so-called "American" party. He died April 10, 1884.

Under the municipal government authorized by the charter of 1836, Lowell began promptly to build up the departments for protection of life and property, for the cultural advancement of the whole people, which it is a prime function of the modern city to administer.

The city at this time had twenty schools, with an average daily attendance of 1,370; high, 75; grammar, 550; primary, 745. There were thirteen churches; two national banks, the Lowell and the Railroad, and one savings bank, the Lowell Institution for Savings. The population was 17,633, of whom the aliens were 2,661 and the colored people 44.

Better streets, better lighting, new school houses and other civic improvements came rapidly under the new government. Not until 1844, however, was the experiment made of paving a public street.

The Old City Hall—Headquarters for municipal activities were in the former town hall, henceforth called city hall, which had been built under vote of the town meeting of May 4, 1829. When for the first time the city government met in this historic structure it was already evident that the available floor space would be required for municipal work. John Adams was, accordingly, ordered to vacate his reading room and circulating library, and the rooms which he had used were allotted to the aldermen, city clerk and mayor. Two rooms on the second floor were assigned to the common council. The hall was fitted forth with seats at a cost of three hundred dollars, and it was provided that thus it might be engaged by the citizens for religious, musical, political and military purposes on payment of a fee, subject to the sole restriction that no engagements might be made for Monday evening when the common council was in session. Subsequently the attic was partitioned and furnished for use as an armory for militia companies. For this purpose a special entrance was opened on the Merrimack street side. Various shiftings of departments took place at city hall in the forties. During 1852 and 1853 alterations were made, giving substantially the interior arrangements that were in existence at the time of the removal of the administrative offices to the present building in Monument square. Throughout its long use for municipal business it was a most comfortable city home, though not, of course, equipped with the facilities of a present-day office building.

The pressure upon city hall was somewhat lessened when in 1852-53, by joint action of the city of Lowell and the Boston & Lowell railroad, the Merrimack street "depot" was erected. To the older generation of Lowell people this was the "depot" par excellence until the present Boston & Maine "station" was built. Over the train shed were Jackson and Huntington halls of precious memory.

Setting Aside the Commons—The development of the North and South Commons began in 1845, when the necessity of breathing spaces

within the city limits began to be understood. Neither was laid out in just the manner which the modern art of landscape architecture would dictate, but both have a certain attractiveness and they have served a most useful purpose. Land for the North Common was deeded May 10, 1845, by the Locks and Canals Company. On the same date the city acquired the larger reservation, the South Common, a tract of 897,749 square feet enclosed by Sumner, South Highland and Thorndike streets, at a price of two cents a foot. An amusing episode arose in connection with the occupation of this latter area. One owner of a small house lot on the easterly side of the common, a well-to-do and quite independent citizen named Patrick Manice, refused to sell. The exasperated municipal authorities thereupon completely enclosed his place, so that for some time he and his family were fed by the kindness of friends who pushed provisions through the slats of the surrounding fence. Much feeling was engendered by Manice's exhibition of "spite," and finally he capitulated. The city in 1856 paid \$3,500 for his holding.

Some Lowell High School History—The school system expanded progressively under the municipal government.

The non-sectarian devotional exercises which thousands of graduates of the high school remember as peculiar to Lowell, had their origin in the first days of the institution. They were designed to offend none in a community that embraced an evergrowing number of religious denominations and sects. The circumstances of their devising were related by James Russell, former principal, at a meeting of the High School Alumni Association in 1865: "In the beginning of 1837," he said, "the schools of Lowell were required to open their morning exercises with devotional exercises. Mr. Carney and myself composed a form of prayer from the book of Common Prayer and Blair's book of prayers, which has been in use ever since. Episcopalians, Unitarians, Orthodox, Baptists and others alike have used the prayers in connection with the 'Scriptures without note or comment.' Never have I known devotional exercises in any school conducted with more decorum or order."

The high school, according to data compiled by Alfred Caddell, had a nomadic existence during the first nine years. Then in 1840 it at last was established in its own building between Kirk and Anne streets. The sexes at first were separated; the boys in one room under Moody Currier, afterwards Governor of New Hampshire; the girls under Miss Lucy Penhallow. In 1842 Franklin Forbes, who had been principal in 1835-36, returned to the school. At the end of three years he resigned to become agent of a manufacturing company at Lancaster. His successor was C. C. Chase, whose service was long and honorable

The system of discipline and instruction up to this time had never been consistently satisfactory. "The school committee of 1851," writes Caddell, "described the instruction as being 'irregular, intermittent and fragmentary,' and their reports are full of tiresome scolding on the irregular attendance, though they never mentioned any changes by which the school could be improved." Private schools in these circumstances flourished. In 1852, however, the two department system was abolished and authority centered at Mr. Chase's desk. Scholarship at once began to come up, and the reputation of the school for lax discipline was gradually outgrown. An incentive to improvement was added in 1858, when J. G. Carney established the system of Carney medals, awarded annually to members of the graduating class for excellence in scholarship and deportment and regularity of attendance.

Organization of a police department was one of the immediate necessities of the newly created city.

Ordinances were adopted in 1836 providing for the office of city marshal and a constabulary force. The head of the system in the first years was paid only \$400 a year. His position, nevertheless, was keenly sought after by rival Whigs and Democrats. In 1844 the body of constables, special constables and tithing-men who comprised the marshal's staff were supplemented by six watchmen who represented for the first time the present-day type of policemen. These watchmen were captained by George W. Hancock. They were employed only at night, on daily wages of \$1.25, the constables continuing to preserve order by day. Later the police system was made to cover all hours of the day, and the duties of the constables were considerably modified. The city marshals of the period were: Zaccheus Shedd, 1836-37; Henry T. Mowatt, 1838; Joseph Butterfield, 1839; Zaccheus Shedd, 1840-41; Charles J. Adams, 1842-47; Zaccheus Shedd, 1848; George P. Waldron, 1849; Zaccheus Shedd, 1850; Charles J. Adams, 1851; James H. Carrin, 1851; Edwin L. Shedd, 1852-54; Samuel Miller, 1855; William H. Clenence, 1859.

Court Houses and Jails Before the Civil War—The first court house in Lowell was the old market building, in Market street, erected by coöperation of city and county in 1837. About 1849 the county's interest in this structure was sold to the city for \$10,000.

The court house on Gorham street, predecessor of the present monumental structure, was built in 1849 at a cost of about \$38,000. In 1855 the North Registry was established, an act of great convenience to the city and the surrounding towns. All the records relating to this end of the county, covering a period of more than 200 years, were copied under a special statute from the originals in Cambridge.

The building of the court house in Lowell, it should be noted, was a marked step in the direction of centralization of legal business of northern Middlesex county. It meant that Lowell became more than ever before a desirable place for residence of able lawyers, who contributed a marked element in the professional and social life of the place. The improving facilities for quick transportation by rail were, in fact, rapidly putting the country lawyer out of business.

The jail on Thorndike street, still one of the conspicuous institutions of the city, was built in 1852-53, after designs by James H. Rand. The architecture is truthfully, and perhaps a little sarcastically, described by Cowley as "semi-Gothic, differing in many respects from any other structure of the kind." Functionally, withal, it embodied what at the time of its erection were the latest and best ideas in penology. As erected the jail was 123 feet long with a width of 90 feet on the front and 54 in the rear. It was four stories high, with octagonal towers at each of the front corners of the main edifice. The scheme provided for entire separation of the quarters for men and women. There were 90 cells for men, 12 for women, two hospitals and four rooms for temporary confinement.

Criticism of the cost of this jail was not wanting. There were those, indeed, who seemed to find that offenders against the law were more magnificently housed in Lowell than were the great majority of the law-abiding. A certain caustic chronicler wrote: "March 20, 1858, the new jail on Thorndike street was first occupied. This magnificent structure cost \$150,000 and contains 102 cells. If the annual rent of this building should be reckoned at 10 per cent. of its cost and if every cell were constantly occupied, the average rental of a cell would be \$132. When to this is added the average cost of each occupant for food, salaries of officers, etc., the very lowest annual expense to the county of each prisoner is \$400. Thus a scoundrel, who thinks his family of six persons fortunate if they can afford to occupy a tenement whose annual rental is \$50, finds, when he is so fortunate as to get into this magnificent jail, the county lavishes on him alone an expense which, if bestowed upon his large and suffering family, would enable them to live in almost luxury. To squander money thus approaches very near a crime."

Judges in Lowell's First Decades—The first judge of the Lowell Police Court was the Hon. Joseph Locke, a man of fine humanitarian instincts and one of the leaders in the temperance cause. He had lived in Billerica, where the story was told of his having been elected to an office, the incumbent of which was expected by custom to treat his constituents in celebration of the victory. Mr. Locke refused to buy the drinks, but turned over an equivalent amount of money to the school authorities, with instructions to buy school books for those

children whose parents had difficulty in providing them. This noble jurist administered justice in Lowell for thirteen years.

Judge Nathan Crosby, who succeeded Judge Locke, was born at Sandwich, New Hampshire, in 1798. After graduation from Dartmouth College in 1820, he settled in Newburyport to practice law. He became interested at the same time in the temperance movement, in behalf of which he lectured throughout New England. In 1843 he came to Lowell through his connection, mentioned elsewhere, with the purchase of water rights in the New Hampshire lakes. As judge of the Police Court during a term of service covering thirty-nine years, he confirmed the tradition of dignity, humanity and uniform courtesy which was established by Judge Locke, and which has been continued by his successors, Judges Hadley and Enright.

Making a Modern Fire Department—The fire department which had been organized under the town was rapidly developed in efficiency and reliability under the new government. Fires, fortunately, were few in the first years of the city. In 1840, for example, there were but six alarms.

A few older residents still remember the "Protection Company" which operated for about ten years. Owen describes it as follows: "In 1840 also the 'Protection Company' was formed. This company was composed principally of business men, and its primary object was to protect personal property in case of fire, not only from the fire but from plunder when removed from the street. The members were provided with a screw-driver, bed key and a bag with which to prosecute their important part in saving property. Being unprovided with any means of fighting fire, they were forced to beat a hasty retreat when the premises became uncomfortably warm, and do police duty in the streets. The company was composed of some of the most influential business men of the period, and became an efficient feature of the department. It continued in existence until 1850, when it disbanded. Stephen Mansur, mayor of the city in 1857, was the first foreman."

Chief engineers of the fire department down to 1860 were: Charles L. Tilden, 1836-38; Jonathan M. Marston, 1838-39; Joseph Butterfield, 1839-40; Josiah B. French, 1840-42; Stephen Cushing, 1842-43; Jonathan M. Marston, 1843-44; Jefferson Bancroft, 1844-46; Aaron H. Sherman, 1846-50; Horace Howard, 1850-53; Lucius A. Cutler, 1853-54; Weare Clifford, 1854-60.

The Introduction of Running Water—The problem of a pure water supply was one which agitated the authorities of Lowell from the first years of the incorporation. In 1838 G. M. Dexter, representing the city, made a survey of Tyng's and Long ponds, to the northwest, both which have a water level that is about sixty feet above the river at Pawtucket dam.

This investigator's estimate was that the former pond might supply the city with about 1,200,000 gallons of water per day. No action was taken, however, and the community continued to draw water from the canals by permission of the Locks and Canals Company and from private wells until 1848, when W. E. Worthen, under instruction from the city council took up the Tyng's pond proposal and reported adversely upon it. He found that much loss of water must be forecasted in bringing it from this distance and that a considerable portion of the city would be above the level of the pond, necessitating pumps and a high surface reservoir. He was doubtful, furthermore, about the quantity of water available. "The outlet of Tyng's Pond," he wrote, "was delivering a few days ago only $1\frac{1}{2}$ cubic feet per second, and the pond was said not to be rising."

With Mr. Worthen's adverse report was ended the scheme of finding city water in one of the local ponds. Soon after this a commission on water supply was appointed, consisting of Oliver M. Whipple, Jefferson Bancroft, John Avery, David Dana, Otis L. Allen and Thomas Hopkinson. This committee retained Mr. Worthen as engineer. Through him a report was secured from the famous chemist, Samuel D. Dana, recommending the use of the Merrimack river water. "Its amount and quality of salts, organic and mineral matter indicate that it is not less pure than that used by the inhabitants of Philadelphia and New York from the Schuylkill and Hudson rivers." Out of this opinion ensued the construction of a water works system under authority of a legislative act of 1855.

The reservoir on Lynde's hill, Belvidere, it should be observed, was not projected as a public enterprise. It was built in 1848 by the manufacturing companies of the city at the urgency of Mr. Francis, engineer. Situated on a hill about a mile and a half from city hall, the top of the embankment stands about 190 feet above the water level in the upper canals. The depth is eighteen feet, with a depth of water of twelve feet, giving an effective height of 184 feet. The enclosure is 174 feet square at the top and 102 feet at the bottom. When filled it carries 1,201,641 gallons of water. The original object was to supply water in case of a fire occurring when the canals were drawn off, to feed the corporation boilers and for use in the boarding houses.

The Establishment of a City Library—The Lowell City Library, one of the most beneficent of municipal institutions, dates from May 20, 1844, when it was founded by enactment of the common council. It was one of the pioneer examples in New England of a library supported out of taxation for the benefit of all citizens. This library, now so imposing that it greatly impresses all visitors, started with slender resources, for it was built upon no large collections previously formed, nor was it at the outset privately endowed. Some help, however, was

available from outside. It happened that in the middle forties the Commonwealth of Massachusetts was endeavoring by a system of subsidies to encourage the several cities and towns to form what were then called "school libraries." Lowell was entitled to about \$1,200 from this source. The new library was accordingly opened under the designation of the "City School Library." It was assigned a room in City Hall. Books were first drawn on February 11, 1845, each person paying annual dues of fifty cents for the privilege. To the librarianship was chosen Josiah Hubbard, who served for thirteen years. A private circulating library was purchased soon after the opening. The period of great expansion of library facilities began after the Civil War.

Central Bridge From Private to Public Ownership—A complete narrative of the relations of the Central Bridge Corporation to the city of Lowell and the town of Dracut, to which Centralville belonged until 1851, would require almost unlimited space. The proprietors of this bridge, already an important artery of traffic, were shrewd men and not above playing the game of politics. They coped cleverly with an increasing public impatience; they finally had to yield, as so many other bridge companies must, to a demand that general taxation rather than private toll gathering should pay for the construction and maintenance of bridges in the city of Lowell.

The story of the Central Bridge Company was told in considerable detail in Alfred Gilman's paper of November 8, 1882. In the first days of the new city, that is between 1836 and 1842, there may have been an undercurrent of popular dissatisfaction regarding the cost of crossing the river, but of this feeling, if it existed, Mr. Gilman found no documentary evidence at all. In the last-named year Dracut called a meeting "to see what measures the town will take to reduce the toll on Central Bridge." Repeated meetings thereafter were held to discover, if possible, the actual cost of operating the bridge. It was shown to the town that the proprietors' dividends had averaged more than nine per cent.

Rebuilding of Central bridge, meantime, had become necessary. On March 23, 1843, the Legislature passed an act permitting reconstruction. The city of Lowell accepted this act on April 5 following; Dracut, after much political maneuvering, on April 3, 1843.

Three years later a question of the advisability of annexing Centralville to Lowell was raised. The city at that time evidently did not want a suburb on the north side of the river, for the vote of December 9, 1850, stood 831 in favor and 1,153 opposed.

Lowell, however, at last "struck hands with Dracut in intent to free Central Bridge." On May 21, 1853, an act was passed authorizing

the city of Lowell and the town of Dracut to buy Central bridge "on such terms as might be agreed."

The proprietors, however, had no intention of "agreeing" and in 1854 the city petitioned that the Supreme Court of the State be authorized to declare what amount might properly be paid. This application was opposed by the bridge company, which had retained Rufus Choate. The city was ably represented by A. P. Bonney and T. H. Sweetser. The result was an enactment whose wording was drawn up by Mr. Bonney: "An act to provide a mode of opening Central Bridge free of toll." Not until 1862 was the issue finally settled and the obnoxious toll lifted.

As municipal advantages increased and as population began to spread into the suburban areas, it was natural to expect that a desire for annexation to Lowell would be expressed by people living just beyond the city limits. The annexation of Belvidere under the town government has been chronicled. It was not many years before another residential village was clamoring for admission.

The Annexation of Centralville—Some eight years before annexation finally was granted the inhabitants of Centralville, as shown by a notice in the "Lowell Courier" of February 7, 1843, petitioned as follows:

Respectfully represent your petitioners that they are inhabitants of that part of Dracutt, in the County of Middlesex, which is known by the name of "Centralville." That their business, feelings and interests connect them much more closely with the city of Lowell than with the town of Dracutt;—That many of them do business in Lowell, and all of them are wholly dependent on that City for their prosperity;—That "Centralville" is separated from the heart of the City of Lowell only by the Merrimack River, and is very intimately connected with the City;—That the remotest part of "Centralville" is not more than half a mile distant from the City Hall, the Courthouse and the Post Office of Lowell.

Wherefore, as a matter of public and private convenience, your petitioners pray that said "Centralville," which is now a part of said Dracutt, and contains less than 300 acres of land, may be set off from said Dracutt, and be annexed to and become a part of the City of Lowell in said County—to wit: Beginning at a point at the thread of the Merrimack River, on the line which separates the City of Lowell from Tewksbury, thence running N. 17 deg., 30 N. E., to a Hemlock tree on the north bank of said River; thence running N. 8 deg., 15 m. W., sixty-seven chains and fifty links; thence running N. 39 deg., W. seventy-five chains nearly, till it reaches the thread of said Merrimack River below Pawtucket Fall; thence turning and running easterly, following the thread of said River to the point of beginning.

This petition was signed by Joseph Bradley and seventy-nine others, representing for the most part families who had built residences on Christian Hill

The original petition was not granted and the agitation continued. Finally in 1851 Centralville was annexed to the city, not so much through any anxiety of Lowell people, it would appear, to extend the municipal bounds as of the people on the further side of the river to secure the benefits of municipal improvements. On December 9, 1850, a referendum was submitted to the voters of Lowell in the following terms: "Is it expedient that the part of Dracut called Centralville be annexed to the City of Lowell, according to the Petition of L. G. Howe and others?" The vote stood: Yeas, 851; nays, 1,153.

Despite this expression of popular reluctance to assume responsibility for this suburb a bill before the Legislature was passed to be engrossed on February 27, 1851, and was duly signed by the Governor. Thus ended the long campaign of the Centralville residents for annexation. Their section of the city grew rapidly after the bridge tolls were remitted, for it is hardly inferior to Belvidere in point of convenience and natural attractiveness.

One of the most famous real estate developments of the forties was that of "Ayer's New City," projected in 1847 by Daniel Ayer. This gentleman purchased a large tract of sandy plain near Hale's brook, laid out some streets and lots and inaugurated a monster auction sale, inciting attendance by promise of a barbecue. The ox was duly roasted and "the occasion drew a crowd of people but the unsavory smell spoiled their appetites." Mr. Ayer later went through bankruptcy, owing money to a large list of creditors. He eventually, however, paid every cent for which he was morally liable. His venture is, of course, still perpetuated in the name of Ayer.

Dedication of the Fair Grounds—A landmark, which has now disappeared, was created in the southern part of the city in 1860, when the Middlesex North Agricultural Society on June 18 dedicated its building at the fair grounds. This reservation, the scene of festivities that for half a century brought residents of all the surrounding towns to Lowell, had been made possible by purchase of land from the Boston & Lowell railroad. The building was one formerly used by the Lowell Bleachery, which was moved over to Gorham street. In it was installed the headquarters of the Massachusetts Agricultural Library Association, with 140 members and an initial collection of about 275 books on subjects connected with farming. The fair grounds, thus set off, became unexpectedly useful in within a few months, for they were rented to the United States Government as a training camp under the name of Camp Chase. Here several thousand men from north Middlesex county were prepared to go to the front.

Postmasters of the New City—The National government most closely touched ante-bellum Lowell through the postal service.

The local postmastership in 1837 was given by President Tyler

to Jacob Robbins (1798-1885), formerly of Harvard. The choice was fortunate. Mr. Robbins, who was a graduate of Westford Academy, was a scholarly, broad-minded man and well equipped for public service. He was, incidentally, one of the first citizens of Lowell to interest himself in forming a collection of objects of fine art. His incumbency of the postmastership lasted four years.

Stephen S. Seavey was appointed postmaster by President Polk in 1841. His salary in the four years of his term sometimes ran as high as \$1,800, which was considered phenomenal.

Alfred Gilman, whose reminiscences have been frequently drawn upon for the purposes of this history, was chosen postmaster in 1849 by President Taylor. His salary was fixed at \$2,000.

President Pierce in 1853 appointed Thomas P. Goodhue to the office. This gentleman died October 1, 1853. He was succeeded by Fisher Ames Hildreth, who held the office during the Pierce and Buchanan administrations and who was in many respects one of the important men of his city. He was of the Dracut Hildreths, whose prominence in the district now Centralville has been recorded. In the seventh generation from Sergeant Richard Hildreth, he was born in Dracut, February 5, 1818, the only son of Dr. Israel and Dolly Jones Hildreth. In his native town he held practically all the offices open to a young man, including that of representative in the General Court. In 1845 he removed to Lowell, where he studied law for a time and then undertook the publication of a newspaper, "The Republican." Later, besides this publication, he acquired the tri-weekly "Advertiser" and weekly "Patriot," which were merged into the "Lowell Patriot." The two papers were under his ownership and management until their suspension in 1863. Among many reminders of Mr. Hildreth's activities of this time is the Hildreth building in Merrimack street, built on the site of the Lowell Museum, incorporated as a stock company in 1850, with Mr. Hildreth as one of its directors. President Pierce's postmaster was one of the most enthusiastic Democrats of ante-bellum Lowell, and a leading personality in the coalition movement of 1850.

Several Lowell Congressmen—The Congressional district of which the city of Lowell was an increasingly important centre continued until 1843 to be represented by Caleb Cushing, of Newburyport, a Whig. The reason for this statesman's retirement has been set forth by Cowley in his "History of Lowell," in a passage which is so redolent with the political afflatus of the time that it merits reprinting: "When the Whig State Convention, in 1842, under the dictation of Abbott Lawrence, passed their stupid resolution of 'eternal separation' from the administration of John Tyler, Mr. Cushing, following the lead of Mr. Webster, refused to concur. Thereupon various hungry politicians who were not worthy to black Mr. Cushing's shoes, combined

to rob him of the confidence of his constituents by an active and unscrupulous use of the coward's favorite weapon—calumny. Weakened by these nefarious tactics, Mr. Cushing retired from Congress and accepted the mission to China. It has been common to sneer at Mr. Cushing as one who Tylerized. But as between Mr. Cushing and his adversaries in the controversy of 1842, the calm verdict of history must clearly be given to him—Mr. Cushing saw clearly and declared frankly that to follow the petulant policy dictated by Mr. Clay was to waste life in a vain chase after bubbles. Considering with what blind persistence this fatal policy was pursued, and with what disastrous results, it cannot be wondered that Mr. Cushing, with his broader statesmanship and catholicity of feeling, held himself aloof until his quondam friends had achieved their ruin; and afterward, when the old issues had become obsolete, and new issues had arisen, he sought a more congenial place in the Democratic party. Of his services as Colonel and Brigadier-General during the Mexican War we shall not here speak. Nor is this the place to dwell upon his subsequent career as Mayor of Newburyport, Representative in the Legislature, Judge of the Supreme Court, Attorney-General of the United States, President of the Charleston Convention of 1860, Commissioner to Codify the United States Statutes, etc.”

In 1843 Amos Abbott succeeded Caleb Cushing as Lowell's representative in Congress. He was described as “a good, clever man who had achieved distinguished success as keeper of a grocer's shop at the cross-roads in Andover; but was utterly insignificant in Congress.” He was, nevertheless, twice reelected.

James H. Duncan in 1849 became congressman in Mr. Abbott's stead. He served two terms.

Tappan Wentworth, Whig, of Lowell, and Henry Wilson, Coalitionist, were rival candidates in the closely contested election of 1852. Cowley afterwards wrote: “The tactics used to defeat General Wilson had better not be scrutinized too closely. His defeat, however, was one of the most fortunate events in a life remarkably full of vicissitudes. Had he been elected to the House in 1852 he would hardly have been a candidate for the Senate in 1855, and the chair then vacated by Edward Everett would probably have been filled by Marshall P. Wilder or Henry J. Gardner.”

Mr. Wentworth, whose service at Washington lasted but one term, was the first resident of Lowell to go to Congress. He was born in Dover, New Hampshire, February 24, 1802, and died in Lowell, June 12, 1875. It will be recalled that he was on the committee which secured the city's municipal charter and that he was elected to the first Common Council. Of this board he was subsequently president. In 1848-49 he was in the State Senate. After his term at Washington he

served again in the Legislature, sometimes in one branch and sometimes in another until 1866, when he retired from public life.

In 1855 Chauncey L. Knapp, another Lowell man, represented the district in Congress. Mr. Knapp was born at Berlin, Vermont, February 26, 1809, where his father, the Hon. Abel Knapp, was an honored citizen holding many offices including that of Judge of Probate of Jefferson (now Washington) county. Chauncey C. Knapp learned the printer's trade and did editorial work at, successively, St. Johnsbury, Boston and Montpelier. Between 1836 and 1840 he was Secretary of State of Vermont. Then, through his opposing Henry Clay, the Whig candidate, he lost many of his political friends and was defeated for reelection. Soon thereafter he left Vermont and came to Lowell, taking up work as a journeyman printer. While at the case he became acquainted with John Greenleaf Whittier, who advised him to remain in a growing city. Mr. Knapp's subsequent experiences in editing and publishing newspapers in Lowell are related elsewhere. He developed through his extensive journalistic training into a facile writer and close student of economic and political questions. This line of interest made him a very valuable Congressman.

In 1859, just before the outbreak of the Civil War, Hon. Charles R. Train (1817-1885) of Framingham, was elected to Congress from the district. He was a son of Rev. Charles Train of that town, a graduate of Brown University and an able lawyer.

Abraham Lincoln's Visit to Lowell—A distinguished visitor of the year following the Mexican War, though his greatness was, of course, not yet fully recognized by Lowell people, was Abraham Lincoln, of Illinois, then an orator of the Whig party. A reminiscence of the martyr President's one appearance at the Spindle City was contributed by Judge S. P. Hadley at the Lincoln Memorial meeting of the Lowell Historical Association in February, 1909. Said Judge Hadley, who was sixteen years old at the time of the rally:

On the platform were a number of prominent Whigs of Lowell, some of whom I knew by sight, Hon. Linus Child, Homer Bartlett, John Wright, Tappan Wentworth, John Avery, L. R. Streeter and others. A man was speaking as I entered. He was a tall man, about forty years of age, over six feet in height, slightly stooping as tall men sometimes are, with long arms which he frequently extended in earnest gesticulation, of dark complexion, with dark, almost black hair, with strong and homely features, with eyes which now kindled into brightness in earnest argument or quiet humor, and then assumed a calm sadness; a forceful and candid man, I thought him, rather than an eloquent one. He pointed his arguments with amusing illustrations and funny stories, which he seemed to enjoy as he told them, for he joined in a comical way in the laugh which they occasioned, shaking his sides, which peculiar manner seemed to add to the good

humor of the audience. He had a voice of more than average compass, clear and penetrating, pronouncing many of his words in a manner not usual in New England.

I have been asked where Mr. Lincoln stopped when in our city. I do not know. As he spoke on Saturday night, and in those days there were no trains to Boston later than 6.30, he must, I concluded, have remained here over night, probably with the chairman of the central committee, Hon. Linus Child, on Kirk street; possibly with Hon. Homer Bartlett, who resided in the same block with Mr. Child. Whether he remained over Sunday I do not know.

The industrial activities on which the political and social life of Lowell was based were already well established when the city became a town. They underwent, in the next quarter century, no extraordinary expansion but rather a steady growth. Some new industries sought the city. More would doubtless have done so if it could have been foreseen that the supply of temporary labor from the nearby farms would presently cease and that a permanent factory population would result. Lowell was weak, and to a certain extent still is weak, in industries employing men operatives. It is now generally understood that a factory community prospers best if opportunities are made for employment of about equal numbers of men and women workers.

The predominance of the cotton manufacture gave Lowell a one-sided development such as a modern board of trade might have tried to obviate. This undoubtedly stood in the way of such diversification of industries as, in our generation, has put Worcester and Providence ahead of the Spindle City in wealth and population. Much, however, that has since happened was not easily foreseen in 1840. The cotton mills paid, usually, good dividends. The markets for their products were seen to be capable of almost indefinite extension. The factories made employment for people who had not before been accustomed to have ready money. Boom years and lean years succeeded each other, but the mills always ran on.

Lowell Studies in Hydraulic Engineering—Such growth of cotton manufacturing as occurred in Lowell after the first corporations were established was furthered by development of the science of hydraulic engineering. At a later date the question of water power became relatively insignificant in the textile industry. The era of cheap coal witnessed the upbuilding of many mills at tidewater, in Fall River, New Bedford and Providence, dependent solely upon accessibility to coal barges. Even in the Merrimack valley many of the mills of late years have regarded steam coal as their primary source of power; water power as an auxiliary. Before the Civil War, however, the question of utilization of every available horse power developed by the Merrimack and Concord was vital to the prosperity of Lowell.

One of the foremost contributions to hydraulic efficiency was made in Lowell during the period in which the turbine water wheel was given its first important trial.

This type of wheel, on a vertical axis and so set in a penstock as to utilize a large percentage of the power of the falling water, was invented elsewhere. Credit, however, for demonstrating its thorough feasibility is given to the Lowell experiments by the well known authority Samuel Webber, who wrote in his "Manual of Power:" "The year 1844 is memorable for the introduction of the turbine wheel, one of which, of seventy-five horse power, after the Fourneyron plan, with improvements, was introduced at the Appleton mills in Lowell by Uriah A. Boyden, an eminent engineer of Boston. Attention had previously been called to this matter, and Mr. Elwood Morris of Philadelphia had in 1843 published a translation of a French work on the subject of turbines by Morin, with notes on the operation of some turbines of his own design at Philadelphia; but the success of the system may be said to have dated from the results obtained by Mr. Boyden at Lowell; seventy-eight per cent. of the gross power of the water, besides that required for driving the bevel gears and jack shaft, having been obtained in the test of the first wheel, and eighty-eight per cent. at the test of more perfectly constructed wheels, built afterwards from the designs of Mr. Boyden. From this time forward the turbine in some form or other has been introduced until it has now entirely superseded the old 'breast' or 'overshot' wheel, giving a much higher percentage of effect from the water, and enabling mill owners to run some portion of their machinery in times of freshets or back-water, when the old wheels were entirely useless."

The complete harnessing of the Merrimack in these first decades of Lowell history was due, in largest measure, to the genius of the engineer and agent of the Locks and Canals Company, one of the foremost hydraulic experts in the world, James Bicheno Francis. He was the presiding genius of the Spindle City. Into whatever feature of Lowell industrial annals one conducts an inquiry between 1834, when he came to the town as a boyish assistant of Major George W. Whistler, down to his death in 1896, one is almost certain to encounter some of the activities of this remarkable man. A sculptured monument some day should attest the gratitude of posterity for his achievements. Yet many of these achievements are themselves monumental.

Mr. Francis' work was especially epoch-making during the period now under survey. The deployment of power in the first decade after coming of the corporations was more or less haphazard and wasteful. It was the task of this young Englishman to conserve and consolidate by application of exact knowledge and imaginative foresight.

The mills had already begun to use turbine wheels to increase the

percentage of effective power secured; one of Mr. Francis' many tasks was to find more water for the turbines.

To understand his personal fitness for this work, some account of the hydraulic expert's early experiences is in print.

Mr. Francis was born May 15, 1815, at Southleigh, Oxfordshire, England. The reason for his coming to this country, where he landed April 11, 1833, has been given by his contemporary, Clemens Herschel, also a hydraulic engineer, in the following way: "An incompatible stepmother, he has said in my hearing, was the cause of his sailing for America, and he well remembered her expressed delight at seeing him and his trunk go out of the house."

As he had already had some training in mechanical work under his father, who was a mine railroad superintendent in South Wales, the emigrant youth applied for a position with Major George W. Whistler, who was then engaged with Major William Gibbs McNeill in building the Shore Line Railroad between New York and Boston. He made such an impression of competence that when Major Whistler shortly afterwards went from Stonington to Lowell to take charge of the machine shop, then controlled by the Locks and Canals Company, young Francis was invited to go with him as his assistant.

The stay of the Whistler family in the house in Worthen street now occupied by the Lowell Art Association was short (though in that time was born there the distinguished author of "The Gentle Art of Making Enemies"). When in 1837 Major Whistler accepted a commission to go to St. Petersburg to build a railroad connecting the two Russian capitals, his assistant, though only twenty-two years old, was promoted to be chief engineer of the Proprietors of Locks and Canals on the Merrimack River. This position he held continuously until 1885, a period of forty-eight years. In 1845 he was also given the title of "agent" of the proprietors. In 1837 Mr. Francis married Sarah W. Brownell, daughter of George Brownell, then superintendent of the machine shop, and thus was bound by family ties, never broken, to this part of New England.

"As agent of the Proprietors," writes Mr. Herschel, "Mr. Francis was in position to design and urge the construction of improvements to the property placed in his charge; and we thus find him designing the Northern Canal the very next year after his appointment, in 1846."

"This canal," continues Mr. Herschel, "now taken as a matter of course, like so many engineering works once they are done and put into operation, was a most notable improvement to the water power created by means of the old navigation canal, originally built to carry boats around Pawtucket Falls. It was built wholly or principally by day's labor, in the most durable manner; it cost, with accompanying work, some \$650,000, a very large sum for those days, and a very large

sum for an engineer only some 30 odd years old to have the responsibility for, and it was built within the estimated cost. During its service of 60 years it is doubtful if any one has ever in any of its features found fault with it." The Northern canal, it hardly need be added, made it possible to get about the maximum of power from the ordinary stages of the river.

A strain of dry humor which was in Mr. Francis' nature comes to the surface in Mr. Herschel's story of the inception of his plan to forestall floods which might have descended by way of the new canal.

An old man living near the falls one day called the engineer's attention to a rock in the river bed just below the dam and said that in boyhood he well remembered a freshet which completely submerged this rock. Asked what year that occurred he stated that it was either 1785 or 1685—he could not exactly remember which.

The quaintly illiterate remark led Mr. Francis to consider very seriously the possibility that at some future date the river might go much higher than it ever had done since the companies first came to Lowell:

What had been was likely to occur again, and while property losses by flood could not perhaps be heavy in 1785 or 1685, yet they must decidedly be guarded against in 1850, when large investments in mills and machinery and a city had gathered below the head of Pawtucket Falls. And so he built a new and safer guard gate in as simple and economical manner as possible. Merely a huge panel, 27 feet wide by 25 feet high, built of sticks the like of which have long since ceased to float down the Merrimack, suspended in grooves over the canal lock by an iron strap, so that boats could pass under it; the strap to be cut so as to let fall the big gate whenever occasion for its use should arise. As the great gate hung there, suspended between heaven and earth, it was a marked feature in the landscape, and was promptly christened "Francis' Folly" by the populace. More than that, it would probably have fared hard with the reputation of the young engineer if 10 or, say, 20 years should have elapsed before the freshet of 65 years previous came to be repeated; but fortune favored.

In 1852, only two years after the building of the guard gate, there came the equal of the old river man's freshet of 67 years before; the iron strap was cut, the huge gate fell and shut off a torrent that but for it would have caused incalculable damage to Lowell and Lowell industries.

It may be added that after this flood leading citizens of the city, headed by J. B. French, desiring, as Meader expresses it, "to testify in some tangible form their appreciation of his wise forecast, procured a testimonial, suitably inscribed, which they presented to Mr. Francis."

The river on the morning of April 22, 1852, rose to the unprecedented height of seventeen feet and six inches. As a precautionary measure stones were placed on Pawtucket bridge. The Concord river

bridges were likewise barricaded. The flood affected downtown Lowell. Davidson, Howe and Wall streets, in Belvidere, ran three feet of water. The barroom of the City Hotel was flooded to the level of the counters. Cellars in the lower parts of Centralville were filled, and many families were forced to take refuge on Christian Hill. Several of the corporation yards were under water and the lower rooms of the mills were threatened.

The premises of Coburn Blood, in Pawtucketville, were deep with water and he was obliged to save his oxen by swimming them to higher land. Although ninety-three years old, Mr. Blood had never seen the river so high.

The work which Mr. Francis did on the Merrimack in this era was summarized in his book called "Lowell Hydraulic Experiments," published in 1858. This went through several editions and became a text-book of hydraulic engineering practice throughout the civilized world. It led to the election of the author to every engineering society of consequence.

Directly supplementing Mr. Francis' studies, which led to the construction of the Northern canal, was a plan of using lakes Winnepesaukee, Squam and Newfound as reservoirs in which surplus water could be stored in spring to increase the flow of the Merrimack in summer. This project was devised and put into operation when the city was about ten years old.

Even in 1840 the irregularities of flow in the river had become a source of trouble to the manufacturing companies. To Nathan Crosby, a young lawyer from Newburyport, afterwards judge of the Lowell Police Court, were due both the original suggestion and the execution of the design for this very essential scheme of conservation of "white coal."

Judge Crosby, according to his published reminiscences, was one day talking with Samuel Lawrence, of Boston, in regard to a mill in which both were interested at Meredith bridge, the second dam on the river below Lake Winnepesaukee. In conversation he threw out the idea that the manufacturing companies of the lower Merrimack ought to gain control of the lake and convert it into a storage reservoir as a means of preventing shortage of water during the midsummer droughts.

The suggestion was received seriously and for some months Judge Crosby was in correspondence with Mr. Lawrence regarding it. Then presently in 1845 John Nesmith, who had become interested in the new city of Lawrence, called one day upon Mr. Crosby and gave him *carte blanche* to buy water powers and outlets in the upper Merrimack valley and to draw upon Samuel Lawrence for whatever funds were needed. This commission was gladly undertaken. "I spent much

time," wrote Judge Crosby, "in examining the shores of the lakes and bays to ascertain what low lying farming lands would be drained or flooded by lowering or raising dams, and what property on the river would be affected in value by withdrawing or rushing along the water as the demands at Lowell might require. It was also desirable to make our widespread purchases as simultaneously as possible, so that the fair market price of the property might not be disturbed. Careful examination of the value of each piece of property was, therefore, made and the asking price ascertained so that future complaint might not be made that the vendor had not received the market value of his property. When the preliminaries had been settled, men were placed at different points and deeds obtained on the same day, or within a few days of the most important places. * * * These purchases were on Lake Winnepesaukee, both bays in Meredith and Sanbornton, both Squams in Holderness and Newfound Pond in Hebron. * * * Some three to five feet of more than 100 square miles of surplus water are now at the command of the Lowell and Lawrence mills—a holding back of spring floods for use in the summer months to the great benefit of every mill between the lakes and the sea."

The total capacity of the Winnepesaukee storage basin, which stands as a monument to Judge Crosby's foresight and initiative, has been figured by the United States Geological Survey at eight billion cubic feet. The lake, at capacity, covers an area of 183 square miles.

The references to the city of Lawrence in Judge Crosby's narrative, it may be said in passing, are evidence of the identity of interests between these adjacent communities on the Merrimack. It should be noted that John Nesmith, besides being the originator of the Lowell School of Belvidere, was the real founder of the city at the mouth of the Spicket. "As early as 1836," says Meader, "Mr. Nesmith, in company with Daniel Saunders, Esq., had made purchases of the land adjacent to the falls on either side of the river and had secured a charter for damming." The panic of 1837 interrupted the scheme for utilizing the power at this point in the river, and nothing was done until 1844, when Mr. Nesmith secured a renewal of his charter and succeeded in interesting several Boston capitalists, with results that are evident in the city of to-day.

With the Merrimack thus used to capacity, Lowell industries were generally prosperous along lines already indicated. The Locks and Canals Company continued to be a dominant factor in the life of the city even though a reorganization of the company occurred in 1845, under which it sold off much of its land and turned over its business of making machinery to a new corporation to be known as the Lowell Machine Shop, with capitalization of \$600,000.

Passing of the Middlesex Canal—The effect of railroad competition, at first regarded by many people as unlikely to injure the traffic of the Middlesex canal, began to be felt seriously as the road's facilities for handling freight improved. In the late forties it was already evident that the canal was likely to be discontinued. Finally, in 1851, the proprietors began to dispose of their holdings of land and buildings in Middlesex Village north of Middlesex street, a tract of about six acres on which stood locks, storehouses, a collector's office and a cottage house and barn. This property was conveyed on September 5 of that year to the father of Judge Hadley, long in charge of the locks. In the conveyance the proprietors reserved the right to the canal until the charter should be surrendered. The last boat to go from Lowell to Boston was one owned by Dix & Rand, in charge of Samuel King, carrying eighteen tons of stone and two cords of wood. It left Middlesex Village, November 25, 1851. The Middlesex canal did not die in law until 1859, when the Attorney-General of Massachusetts put it out of business.

✓ **Figures of Pre-War Manufacturing at Lowell**—In 1856, when Charles Cowley made a commercial survey of the city for publication in a book which contained on opposite pages a condensed history of the community and advertisements of its leading firms, Lowell had twelve large manufacturing corporations operating some fifty mills. The aggregate capital of these concerns was about fourteen million dollars. The total value of their real and personal estate was estimated at twenty-two million dollars. It was calculated that the home market which they had created had increased the value of farm properties in the neighborhood of the city by at least a million dollars. Since 1845
1 the number of spindles had doubled, the total now standing at 400,000. There were about 12,000 looms. Of cotton the mills required annually about 36,000,000 pounds; of wool, 5,000,000 pounds. Other raw materials were used in corresponding amounts. The annual output of the looms amounted to 80,000,000 yards of cotton cloth; 20,000,000 yards of calico; 15,000,000 yards of broadcloths and cassimers, 1,000,000 yards of carpet; 3,000 yards of rugs; \$2,000,000 worth of machinery. The daily output of woven cotton was about two hundred miles, enough to encircle the globe twice in a year. The most celebrated single product was the series of textiles known as "Merrimack Prints," made by the corporation of that name under direction of John D. Prince, for many years superintendent of the print works.

In addition to the plants of the larger corporations, Lowell at this time had wadding and batting mills, a good-sized flannel mill, several tanneries, sawing and planing mills, machine shops, dye houses, screw-bolt factories, card factories, bobbin and shuttle factories, bedstead

factories, a wire fence factory, a bagging mill, a grist mill and other minor industries.

Transportation facilities of this period were well established. An immense business in freight and passengers was done over the Boston & Lowell railroad. The Stony Brook railroad, giving Lowell a most valuable connection with the West, had been incorporated in 1845, with a capital of \$300,000, and opened to shippers in July, 1846. Lowell and Lawrence were now connected by rail and the Lowell and Salem railroad, incorporated in 1848, with capital of \$400,000, and opened for business August 1, 1850, gave ingress to coal and other sea-borne commodities.

Technique of Cotton Manufacture in Nineteenth Century—The technical processes of cotton manufacture at Lowell in the forties and fifties were in many respects the same as those of to-day, though, of course, mechanical improvements have been numerous.

The cotton was bought by agents in the South, shipped to Lowell *via* Boston or Salem and deposited in storehouses. As required it was wheeled to the carding room, on the first floor of the factory. Here each bale was opened and the cotton from the various sales mixed to insure a uniform quality. By action of a whipper the cotton was beaten and thrown into a state of fluffiness. Thence it passed through a conical willow emerging ready for the picker.

The picker room was customarily in a building apart from the rest of the mill, on account of danger due to the rapid movement of the machinery. Here the cotton was laid upon a strip of cloth or leather apron and drawn into the picker where it was thoroughly opened and freed from lint and dust. Thence it passed through the lapper, coming out in sheets, neatly wound around a wooden cylinder.

The laps were taken to the card room and applied to the backs of cards. The processes of carding were two fold; the first through the breaker and the second through the doubler or lap-winder.

After carding, the cotton was turned over to women operatives who sent it through the drawing frame, by means of which the fibres were laid in one direction and brought together in a rope-like shape. These strands were twisted by the double-speeder into a coarse roving, which the stretcher drew out still further.

From the carding room the fibres went to the spinning room on the floor above. The frames prior to 1845 were all of the "throstle" type; though mule spinning was introduced soon after that. The roving was distributed by a man to the operators of the speeders, throstles, warpers and dressers. Over each machine was the familiar one-week clock, used to mark the quantity of work done.

The woof or filling came from the spinning room ready for the weaver, but the warp went to the dressing room, where the yarn was

warped off from the spools to the section beams. These beams were transferred to the dresser for sizing, brushing and drying. Then, with the ends drawn in through the harness and reed by hand, the yarn on eight section beams was transferred to a loom beam.

Two weave rooms to each mill was the rule, with two or three overseers and a boy to distribute the yarn in each room. Some 130 weavers to a room were employed.

The woven fabric was carried to the cloth room, trimmed, measured, folded, recorded and then either baled for the selling agency or delivered at the print works.

Aniline dyes were, of course, still far in the future and the calico printing of 1850 and thereabout involved more laborious operations than now. A good description of the processes was furnished to the historian, Rev. Mr. Miles, by Dr. Samuel L. Dana, chemist of the Merrimack print works. In this account it is shown that upon being received from the manufactory the cloth was singed, to get rid of the fine nap, by running over a half cylinder of copper, heated red hot. "This singeing process always excites the wonder of the beholder who is not a little astonished that the cloth is not injured."

The bleaching was done in accordance with Dr. Dana's principle that "a good white is not only the soul of a print, but without it no good and brilliant color can be dyed." The cloth to be bleached was steeped in warm water for some hours, washed in the dash wheel and subjected to the following operations: boiling by steam in creamy lime; washing in the dash-wheel; boiling in alkali by steam; washing in the dash wheel; steeping in bleaching powder solution for some hours; steeping in oil of vitriol and water," about the strength of lemon juice;" washing in the dash wheel; squeezing between rollers; ironing in the flatwork ironer, then called the "mangle."

In the printing of the bleached cloth four to six colors were applied by the printing machine—others, if needed, by hand with blocks after the rest of the work was finished. The paste containing a mordant to fix the dyes was applied with an admixture of "sightening" to enable the printer to judge of the quality of the work. The popular mordants were alum and copperas, either of which was first modified into acetate of alumina or iron. In the color shop were prepared the various dyes and their accessories. Dyeing was then, of course, on vegetable basis, with madder, indigo and logwood prominent among the dye-stuffs.

Having been printed and dried the cloth was "aged" in order that a chemical combination might take place between the mordant and the cloth, the time of this process varying, according to circumstances, from two or three days to as many weeks. The cloth was then passed by means of rollers through a boiling hot solution of phosphate of

soda, to give insolubility to any uncombined mordant and to wet the cloth evenly. After washing in the dash wheel and removal of all thickening by immersion in hot bran and water or meal and water, the fabric was ready for the large wooden dye vats into which it was introduced over a winch. Steam was admitted and the goods turned, with the temperature of the water raised gradually, until, when the boiling point was nearly reached, the mordanted cloth was perfectly dyed. It was taken out rinsed, washed, and sometimes stiffened. Practices of heavily loading with metallic oxides, soap and glue, light flimsy cloth, not unknown in some textile factories of New England at this day, had hardly been conceived of in the simple era under consideration.

A designer, with an assistant or two, drew the patterns which were reproduced at first on a small steel dye, thence transferred to a steel cylinder in relief and from this pressed into a copper roller under high pressure.

Development of the Carpet Manufacture—One of the prime industrial developments of this period was the introduction of carpet weaving at Lowell. Prior to 1842 all three-ply and ingrain carpets were made on hand looms, the motive power being furnished by the individual weaver. In that year a New England man, E. B. Bigelow, conceived a series of devices for an automatic carpet loom. His invention was brought to the attention of the treasurer of the Lowell Manufacturing Company, who secured the exclusive right to make ingrain carpets by the Bigelow process. The carpet works soon became one of the show industries of the city. Prior to 1863 upwards of 25,964,185 yards of carpet had been woven at the works in Market street and Lowell carpets had become famous throughout the new world.

This was also the period of the establishment of the dyestuff trade in Lowell. The brothers Talbot, Charles P. and Thomas, founders of a family prominent in manufacturing at Lowell and North Billerica, settled here in the first years of the new city. They were of a race of woolen manufacturers of Ireland whose father had engaged in business at Cambridge, New York. The elder brother built up in Lowell a famous business in dyestuffs under the style of C. P. Talbot & Co. The firm in 1851 bought the water power of the Middlesex Canal Company at North Billerica, and in 1857 built there a manufactory of woolen flannels, the nucleus of the present Talbot Mills. The civic services of both brothers were many, the younger rising to be Governor of the Commonwealth in 1879.

The Crompton Loom at Lowell—Although the manufacture of the Crompton loom has been prominently associated with the Massachusetts city of Worcester, the first successful try-out of this loom

was in the Middlesex mills at Lowell. The Crompton family had been noted for several generations for their inventiveness. The original Samuel Crompton invented a device in cotton manufacture for which Parliament gave him an honorarium of \$25,000. Thomas B. Crompton invented an apparatus for drying paper which was introduced into the Farnsworth mills, of which he was proprietor. The first of the family to come to America was William Crompton, who after being here about a year devised a loom for weaving figured cassimeres. Mill men saw at once that this would be a valuable improvement. Crompton returned to England in 1839, secured a patent and returned to the United States with his wife and children. In the year following he arranged to install his loom at the Middlesex mills. While the importance of the invention was appreciated, the work of introducing it elsewhere went slowly and Crompton became discouraged. In 1851, when the patent expired, he was still a poor man. His son, however, George Crompton, had come into manhood and perhaps had brought to the enterprise a driving ability which the original inventor lacked. He entered, at all events, into partnership with Merrill E. Forbush and began at Worcester the commercial production of the best loom for figure weaving of that date. Within a few years the Crompton looms works, became, as now, one of the show factories of New England. Lowell at least claims the credit for the first demonstration of the value of the invention.

The Beginnings of the Patent Medicine Trade—Among the newest businesses that had sought a location in the city, one of especial celebrity should be noted. Patent medicine manufacturing has probably brought more publicity to Lowell than any other single industry. For many years past the labels on "Ayer's" and "Hood's" preparations, to say nothing of their widely read almanacs and newspaper advertisements, have carried the city's name and fame to every part of the world. This very interesting industry began to be developed in 1843, when J. C. Ayer undertook the making and marketing of "Cherry Pectoral." "Cathartic Pills" soon followed. The establishment on Middle street was built up rapidly under modern methods of manufacture and advertising, so that when Cowley wrote his 1856 book it was already accounted "the largest individual interest in the city," the receipts in that year amounting to more than half a million dollars. An edition of three million copies of the almanac then went broadcast and the bottles of medicine shipped out of Lowell would have sufficed to give three doses a year to every man, woman and child in the United States.

The career of Dr. James C. Ayer, who inaugurated the patent medicine industry at Lowell, was one of the most striking of this period. Born at Groton in 1818, he came as a young boy to Lowell.

At the Lowell high school he was a fellow pupil classmate of General B. F. Butler and others who later became distinguished. He also had special instruction in Latin from the Rev. Dr. Edson. After leaving school he was apprenticed to Jacob Robbins, then the leading apothecary of the city. In this shop he first compounded the cherry pectoral that later became famous. At twenty-three young Ayer bought out his employer's interest and moved into a store belonging to the Hamilton Manufacturing Company at the corner of Central and Jackson streets. In 1855 he admitted to partnership his brother, Frederick Ayer. In that year Ayer's Sarsaparilla was first marketed. Its success was almost instantaneous. The senior partner in 1860 was granted the degree of M. D. by the Philadelphia Medical University. He in the meantime had married Josephine M. Southwick and had bought the Old Stone House in Pawtucket street.

Effects of the Factory System on Operatives—The effect of the factory system upon those employed in the mills was an engaging subject of observation, discussion and speculation among nearly all who wrote about Lowell in the middle nineteenth century. Just as they were in the first years of the city, people were still anxious to know what good and what harm was done by a plan which brought together in great workshops thousands of workers, most of them women, and nearly all of them reared in quiet country homes.

"Lowell is not amusing," wrote M. Chevalier, the French economist, "but it is neat, decent, peaceable and sage. Will it always be so? Will it be so long? It would be rash to affirm it; hitherto the life of manufacturing operatives has proved little favorable to the preservation of severe morals. So it has been in France as well as in England; in Germany and Switzerland as well as in France. But as there is a close connection between morality and competence it may be considered very probable that while the wages shall continue to be high at Lowell, the influences of a good education, a sense of duty and the fear of public opinion will be sufficient to maintain good morals."

Its defense of the reputation of Lowell mill operatives against current charges of immorality comprises a considerable part of the little book "Lowell as It Was and as It Is," which Rev. Mr. Miles, minister at the First Unitarian Church, published in 1845.

The moral effects of the factory system had, naturally, been under attack almost before it was established. It was obviously vulnerable from the angle of experience overseas, to say nothing the disposition of all reactionaries in all times to predict that whatever effects change will necessarily accomplish deterioration.

In taking up "the provisions made for the health, comfort and moral protection of the operatives, and the actual character which the

mass of these operatives sustain," Mr. Miles begins with an admission that "Lowell has been highly commended by some, as a model community, for its good order, industry, spirit of intelligence and general freedom from vice. It has been strongly condemned by others as a hotbed of corruption, tainting and polluting the whole land." Basing his generalization upon his personal experiences of nine years and believing himself to be free from partisan prejudice, the clergyman reached a conclusion very favorable to the present morality of the community even though he conceded that it "is an experiment whether we can preserve here a pure and virtuous population; whether there are no causes secretly at work, and to be developed in the course of thirty or forty years, to lower our standard, and to sink our character; whether we can run a career of half a century free from the corrupting and debasing influences which have almost universally marked manufacturing cities abroad."

The circumstances of factory life in Lowell which Mr. Miles developed in his book included one of especial importance in the fact that operatives of the first decades came out of an environment which usually produced self-respecting young people. They were, as has so often been observed, boys and girls from the farms of New England. The author of the forties, it is true, does not make allowances which every writer of to-day would feel constrained to make for the existence and persistence of much moral degeneracy in rural New England; for debased strains in the hill towns that have almost automatically produced criminals in generation after generation. He assumed "virtuous rural homes" in a land where in 1840 as in 1918 some were inhabited by the "virtuous" and some by degenerates addicted to the practice of every known vice. Yet, making this allowance it may stand as a fact that early Lowell down at least to the Civil War was relatively fortunate in its "supply of help from the virtuous homesteads of the country."

It was emphasized that "we have no permanent factory population. This is the wide gulf that separates the English manufacturing towns from Lowell. The female operatives do not work, on an average, more than four and a half years in the factories. They then return to their homes and their places are taken by their sisters or by other female friends from their neighborhood. * * * The former [in England] are resident operatives, and are operatives for life, and constitute a permanent dependent factory caste. The latter [in New England] come from distant homes to which in a few years they return to be the wives of the farmers and mechanics of the country towns and villages. The English visitor to Lowell, when he finds it so hard to understand why American operatives are so superior to

those of Leeds and Manchester, will do well to remember what a different class of girls we have here to begin with."

Drunkenness among women operatives was apparently very uncommon in 1845, and no doubt among men had been greatly reduced during the first years of the temperance movement. Mr. Miles states that "no persons are employed on the Corporation who are addicted to intemperance, or who are known to be guilty of any immoralities of conduct. As the parent of all other vices intemperance is most carefully excluded. Absolute freedom from intoxicating liquors is understood throughout the city to be a prerequisite to obtaining employment in the mills, and any person known to be addicted to their use is at once dismissed. This point has not received the attention from writers upon the moral condition of Lowell which it deserves; and we are surprised that the English traveler and divine, Dr. Scoresby, in his recent book on Lowell, has given no more notice to this subject. A more strictly and universally temperate class of persons cannot be found than the nine thousand operatives of this city; and the fact is as well known to all others living here as it is of some honest pride among themselves. In relation to other immoralities, it may be stated that the suspicion of criminal conduct, association with suspected persons and general and habitual light behavior and conversation are regarded as sufficient reasons for dismissal, and for which delinquent operatives are discharged."

Dismissals from the mills, Mr. Miles goes on to state, were of two classes: honorable discharge and dishonorable discharge.

There appears to have been so much cohesion among the factory employers of the day that the possession of an "honorable discharge" certificate was highly prized among the employees. It meant that another job could be readily secured. Those, on the other hand, who left one employment under a cloud were blacklisted. "*Such persons*," as Mr. Miles says in italics, "*obtain no more employment throughout the city.*"

The kind of offences for which operatives were dishonorably discharged may be noted by a few specific cases:

1838. Dec. 31. Ann ———. No. 4, weaving room; discharged for altering her looms and thinning her cloth.

1839. Jan. 2. Lydia ———. No. 1, spinning room; obtained an honorable discharge by false pretences. Her name has been sent round to the other Corporations as a thief and a liar.

Jan. 3. Harriet ——— and Judiah ———. From No. 4, spinning room, and No. 5, weaving room; discharged as worthless characters.

Jan. 9. Lydia ———. From No. 2, spinning room; left irregularly; name sent around.

Feb. 15. Hadassah ———. From No. 3, lower weaving room; discharged for improper conduct—stealing from Mrs. ———.

March 14. Ann ———. No. 2, spinning room: discharged for reading in the mill; gave her a line stating the facts.

March 29. Harriet ———. No. 4, carding room; Laura ———, No. 4, spinning room; Ellen ———. No. 1, carding room; George ———, repair shop—all discharged for improper conduct.

April 3. Emily ———. No. 5, carding room; discharged for profanity and sundry other misdemeanors. Name sent round.

The moral surveillance which is shown by such an extract from a corporation's books to have been regularly practiced among the "help," seems to this age to be more paternalistic than present day operatives would endure. The overseer, indeed, sitting at a little desk near the door of each department was an arbiter of reputations, for he was "held responsible for the good order, propriety of conduct and attention to business of the operatives in that room." His word went, when it was a question of "sending a name 'round." There must under such a system have been instances of injustice. No provision for appeal against blacklisting is mentioned by Mr. Miles. It presumably did not exist.

The moral control which the women operatives exercised among themselves is emphasized by various writers who have described the life among the industrial workers of Lowell. Public opinion was beyond doubt a more potent factor for discipline in the days when virtually all the mill girls were of one race and language, of a homogeneous culture in other words, than now when they are separated by barriers of language and diverse social customs. "A girl *suspected* of immoralities, or serious improprieties of conduct," writes Miles, "at once loses caste. Her fellow boarders will at once leave the house if the keeper does not dismiss the offender. In self-protection, therefore, the matron is obliged to put the offender away. Nor will her former companions walk with, or work with her; till at length, finding herself everywhere talked about, and pointed at and shunned, she is obliged to relieve her fellow operatives of a presence which they feel bring disgrace."

Queries, in the form of what would now be called a "questionnaire," were put by Mr. Miles to several mill agents and through them to the overseers of the corporations. The data thus obtained remain as perhaps the best extant documentary evidence of the racial character of the operatives of that time and the ideals under which it was undertaken by the companies to protect their morality.

Characteristic statistics are those furnished by the Merrimack Manufacturing Company. The mill selected is our No. 3 mill. The names of the overseers are as follows, viz.:

Jesse Phelps, who has been Overseer over 19 years.

John W. Holland, who has been Overseer over 17 years.

George Wellman, who has been Overseer over 11 years.
 James Townsend, who has been Overseer over 11 years.
 James C. Crombie, who has been Overseer over 1 year.

Number of girls employed usually in the mill, two hundred and forty.

Natives of—	
New Hampshire	90
Vermont	61
Maine	58
Massachusetts	19
Canada	8
Ireland	4
	<hr/>
	240

In answer to the inquiry respecting their health, twenty-two answer that their health has been better, since working in the mills, than before; one hundred and forty-three, that it has been as good or about the same; and seventy-three that their health has not been as good as formerly; though many attribute their loss of health to other causes than working in the mills.

One hundred and twenty-eight of the two hundred and forty are connected with Sabbath schools, some few as teachers.

One hundred and three are members of some Christian church.

Thirty-one have been heretofore engaged in teaching school.

An inquiry regarding the "prevalence of licentiousness" was answered by quoting from direct depositions of the several overseers listed above. Thus Overseer Phelps, who had come to East Chelmsford from Waltham, and who was in 1839 the oldest overseer in the city, wrote:

It has been the uniform rule of the company to discharge every person, male or female, known to be guilty of licentious conduct. The facts are usually discovered and made known by the other girls working in the same room or boarding in the same house; and if the guilty parties were not at once discharged, their companions would in most, if not in all cases, themselves leave. I should judge that the whole number discharged by the Merrimack Company, during my connection with it as an overseer, which has been between nineteen and twenty years, has not exceeded two or three each year, and that such cases have been more rare of late years than formerly. I do not recollect ever having discharged but three for licentious conduct during the whole time I have been in the manufacturing business.

Similar testimony was offered by Mr. Crombie, who wrote:

I have never known any person retained in the employ of the company when known to be guilty of licentious conduct. I have been employed as overseer only one year, but was assistant overseer nearly six years. Since I have been overseer no one in my room has been discharged, or suspected of licentious conduct. While I was second overseer there were three girls discharged from the room where I

worked for this cause; no one of them, however, had worked in the room over a week before her character became known or suspected and she was at once discharged. Such cases are very uncommon, however, and I do not think I have heard of one case a year, upon an average.

A summary of the results of Rev. Mr. Miles' study reached the following conclusion:

Of the six thousand three hundred and twenty female operatives in Lowell, Massachusetts furnishes one-eighth; Maine, one-fourth; New Hampshire, one-third; Vermont, one-fifth; Ireland, one-fourteenth; all other places, principally Canada, one-seventeenth. Of all these operatives, more than three-sevenths are connected with some Sunday school, either as teachers or pupils, this being two thousand seven hundred and fourteen in all. About three-eighths of them are church members, this being two thousand two hundred and seventy-six in all. Five hundred and twenty-seven have been teachers in common schools. The average time during which these female operatives work in the mills is between four and five years. A large majority of them report their health as being either better than, or as good as, it was before entering the mill.

Intimately connected with the question of the operatives' morality was that of their physical health, which greatly exercised the philanthropically inclined of the day.

"The mills themselves," wrote Miles, "are kept of a uniform temperature, being heated in cold weather either by steam or by hot air furnaces. The rooms are lofty, are well ventilated, and are kept as free from dust as is possible, while the machinery is carefully boxed or otherwise secured against accidents."

Despite these provisions made by the corporations for comfort and efficiency, the historian admits that there were "conflicting statements put forth" as to the health of the operatives and that it was "extremely difficult to arrive at the exact facts of the case." Cowley, writing ten years later, stated that the sanitary condition of the mills "is remarkably good." He maintained, nevertheless, that the relatively good health of the factory workers was due primarily to the fact that few of them stayed in the factories for many years and that "a one-sided development is induced by the endless repetition, without variation, of one simple mechanical process, or series of processes—where unwholesome particles of vegetable or metallic dust are constantly inhaled into the lungs—where the conditions of the atmosphere are generally unfavorable to robustness and vigor."

The situation, in brief, which caused the first life insurance companies doing an industrial business to create special mortality tables for the working class was already indicated in some figures from

which Cowley arrived at the conclusion that "the condition of the operatives is unenviable at the best. The statistics of deaths in Massachusetts for 1854 show that while 7,735 farmers died whose average age was over sixty-four years, there died during the same year 7,781 mechanics whose average age was only forty-six years, showing a difference of eighteen years against the mechanic." The hopeful circumstance, according to this historian, was that most of the operatives, after a few years' service in the mills, still went back to their country homes. "But let the curse of a permanent operative population fasten itself upon us," he wrote, "and all the 'woes unnumbered' of the Iliad would be realized here."

The foregoing picture, drawn by a historian who, from internal evidence in his book, is seen to have been reading Thomas Carlyle, is somewhat darker than that drawn by his optimistic predecessor who proved from the 1844 figures that Lowell was at least a more healthful town than some of the other industrial centres of New England: "Deaths to the population in Providence, one in forty-one; in Salem, one in fifty-four; in Worcester, one in fifty-two; in Lowell, one in fifty-seven—being an advantage in comparison with the other places of fifteen, three, and five per cent. in favor of the latter city." Miles quotes at some length from a pamphlet on "The Character and Condition of the Females employed in the Lowell Mills," published in 1841 by Dr. Elisha Bartlett, first major of the city, a characteristic passage being the following:

The general and comparative good health of the girls employed in the mills here, and their freedom from serious disease, have long been subjects of common remark among our most intelligent and experienced physicians. The manufacturing population of this city is the healthiest portion of the population, and there is no reason why this should not be the case. They are but little exposed to many of the strongest and most prolific causes of disease, and very many of the circumstances which surround and act upon them are of the most favorable hygienic character. They are regular in all their habits. They are early up in the morning, and early to bed at night. Their fare is plain, substantial and good, and their labor is sufficiently active and sufficiently light to avoid the evils arising from the two extremes of indolence and over-exertion. They are but little exposed to the sudden vicissitudes, and to the excessive heats and colds of the seasons, and they are very generally free from anxious and depressing cares.

Those in fact who had predicted that Lowell would speedily become like the English Manchester, of the nineteenth century, a city of squalor, abject poverty and debasing vices, saw their expectations in no large degree fulfilled. The comparison between the two cities was for many decades favorable to the New England municipality;

and if now the opportunities for drawing a contrast that is in favor of this side are less obvious, that is because life in the English factory towns has been enriched by recent collective measures. Writing in 1851, Charles Henry Dalton, a native of Chelmsford and graduate of the Lowell high school, said: "There is misery and degradation in this city [Manchester, England,] among the factory classes which is not dreamed of in Lowell * * * The hospitality and good manners and elegant, stylish mode of living of the rich is pleasant to their guests, but the misery, heart-breaking to look upon, in some of the crowded streets of Manchester, is fully strong enough in contrast." It was no paradise for the working class which was surveyed in the other factories, and ideally healthy homes were not to be found in boarding houses where "six and eight girls frequently occupied the same bed chamber." Yet, in intent certainly, and in outcome mainly, the status of the city of rising forty thousand people was still creditable to the Puritan conscience.

The condition and character of American factory operatives at this period were, indeed, in such contrast to the unprincipled exploitation of the working class in Great Britain that lessons from this side of the Atlantic were sometimes commended to English manufacturers. The New England operatives were even made the subject of a book, just mentioned, by the Rev. William Scoresby, D. D., of Bradford, Lancashire, who strongly commended the American treatment of mill hands.

Dr. Scoresby visited Lowell in August, 1844. He was favorably impressed by the city and wrote: "On entering Lowell a stranger is naturally struck with the contrast presented by that place to an English manufacturing town. Here in Bradford, for example, every building is of stone or brick, solid, substantial, with little of the freshness that might be looked for in so rapidly increasing a town; there in Lowell, though the mills and boarding houses are generally of brick, the chief part of the other buildings, houses, hotels, and even churches, are of wood, and nearly the whole as fresh looking as if built within a year." The lack of the grime due to soft coal smoke was likewise surprising to the English divine, who attributed much of the cleanness to the general employment of water power in manufacturing.

Dr. Scoresby dined at the Merrimack House and in the afternoon was taken through several of the factories. He saw young women at work but few young children, whose labor was then so generally exploited in England. Of these employees he wrote:

They were neatly dressed and clean in their persons; many with their hair nicely arranged and, not a few, with it flowing in carefully curled ringlets. All wore (being the height of summer) a light, calico-

covered bonnet, a sort of caleche, large enough to screen the face, and with a dependent curtain shielding the neck and shoulders. Many wore veils and some carried silk parasols. By no means a few were exceedingly well looking—more pallid than the factory girls with us, and generally slight in their figures. There was not the slightest appearance of boldness or vulgarity; on the contrary, a very becoming propriety and respectability of manner, approaching with some to genteel.

One of the most famous of distinguished foreigners who followed the established custom of the middle nineteenth century in running out to Lowell was Charles Dickens. His impressions of the United States, as in the winter of 1842, the humanitarian humorist, as all the world knows, brought out in a volume of "American Notes." Many of his observations created much offence in this country. He was horrified by the spectacle of negro slavery in a land which boasted of regard for human rights and still "knotted the lash, heated the branding iron, loaded the rifle and shielded the murderer of the slave." Some of the uncouth customs of a people, many of whom were still in the backwoods stage, excited either his disgust or his merriment. In his reminiscences he said many tart and uncomplimentary things, while always protesting that he was naturally prejudiced in favor of the American experiment.

Of the city of Lowell, however, Charles Dickens had nothing unpleasant to say. His quaint and kindly description of the new city is in his best vein, somewhat prolix and fine spun, but full of delightful little quips and turns of speech. He saw the place in midwinter on a day when "nothing in the town looked old to me, except the mud which in some parts was nearly knee deep and might have been deposited there on the subsiding of the waters of the Deluge." The spick and span quality of the city, for the rest, impressed the visitor. "The very river that moves the machinery in the mills (for they are all worked by water power) seems to acquire a new character from fresh buildings of bright red brick and painted wood among which it takes its course; and to be as light-headed, thoughtless and brisk a young river, in its murmurings and tumblings, as one would desire to see. One would swear that every 'Bakery,' 'Grocery' and 'Bookbindery,' and every other kind of store took its shutters down for the first time and started in business yesterday. The golden pestles and mortars fixed as signs upon the sun-blind frames outside the Druggists' appear to have been just turned out of the United States Mint; and when I saw a baby of some week or ten days old in a woman's arms at a street corner, I found myself unconsciously wondering where it came from; never supposing for an instant that it could have been born in such a young town as this."

The factories and boarding houses were, of course, shown to the

English author, who expressed himself as greatly pleased by the neatness and self-respect of the operatives. He noted that they "had serviceable bonnets, good warm cloaks and shawls; and were not above clogs and pattens." He found them "healthy in appearance, many of them remarkably so." "There are a few children employed in these factories, but not many. The laws of the State forbid their working more than nine months in the year, and require that they be educated during the other three."

Dickens had in mind the attitude of English readers of three-decker novels toward the lower classes of society when he notified his constituency that he had discovered in Lowell "three facts which will startle a large class of readers on this side of the Atlantic very much. Firstly, there is a joint stock piano in a great many of the boarding houses. Secondly, nearly all these young ladies subscribe to circulating libraries. Thirdly, they have got up among themselves a periodical called 'The Lowell Offering,' 'a repository of original articles, written exclusively by females actively employed in the mills,'—which is duly printed, published and sold; and whereof I brought away from Lowell four hundred good solid pages, which I have read from beginning to end."

Against the charge, sure to be raised in the England of that day, that the young women aspiring thus toward things cultural were aiming "above their station," Dickens set up a thesis of quite modern and democratic import. "Are we quite sure," he asks, "that we in England have not formed our ideas of the 'station' of working people from accustoming ourselves to the contemplation of that class as they are, and not as they might be? I think that if we examine our own feelings, we shall find that the pianos, and the circulating libraries, and even the 'Lowell Offering,' startle us by their novelty and not by their bearing upon any abstract question of right or wrong. * * * For myself, I know no station in which, the occupation of to-day cheerfully done and the occupation of to-morrow cheerfully looked to, any one of these pursuits is not most humanizing and laudable. I know no station which is rendered more endurable to the person in it, or more safe to the person out of it, by having ignorance as its associate. I know no station which has a right to monopolize the means of mutual instruction, improvement and rational entertainment; or which has ever continued to be a station very long, after seeking to do so."

Nearly two decades later another famous English writer visited Lowell and again bore witness to the decency and favorable appearance of Lowell operatives. Anthony Trollope, in 1862, published his impressions of America, and, of course, after the fashion of the time, included a few paragraphs concerning the Lowell mill girls, of which the following is the most significant passage:

That which most surprises an English visitor in going through the mills at Lowell is the personal appearance of the men and women who work in them. As there are twice as many women as men it is to them that attention is chiefly called. They are not only better dressed, cleaner and better mounted in every respect than are the girls employed at manufactories in England, but they are so infinitely superior as to make a stranger immediately perceive that some strong cause must have created the difference. We all know the class of young women whom we generally see serving behind counters in the shops of our larger cities. They are neat, well dressed, careful, especially about their hair, composed in their manner, and sometimes a little supercilious about the propriety of their demeanor. It is exactly the class of young women that one sees in the factories at Lowell. They are not sallow, nor dirty nor ragged nor rough. They have about them no signs of want, or of low culture. * * * One would, of course, be disposed to say that the superior condition of the workers must have been occasioned by superior wages. But the higher payment is not the chief cause. Women's wages, including all that they receive at the Lowell factories, average about 14s. a week, which is, I take it, fully a third more than women can earn in Manchester, or did earn before the loss of southern cotton began to tell upon them. But if wages at Manchester were raised at the Lowell standard, the Manchester women would not be clothed, fed, cared for and educated like the Lowell women.

In 1857 Dr. Nathan Allen, long interested in matters of public health, wrote that "Lowell, whether compared as a whole with other cities and towns in New England, or its American population with the same class in other places, presents a remarkably favorable state of health for the past twenty-five years. The absence of aged people in the population, to increase the rate of mortality, is offset in a great degree by the number of deaths occasioned by casualties. From 1830 to 1846 two hundred and thirty-one deaths are reported as occasioned by drowning, accidents with machinery, etc."

Tuberculosis was, of course, the characteristic disease of Lowell as of all manufacturing cities before present methods of prevention and treatment were in vogue. A record of deaths from this disease in ten years is: 1851, 101; 1852, 138; 1853, 150; 1854, 173; 1855, 182; 1856, 187; 1857, 183; 1858, 148; 1859, 176; 1860, 147. It may, perhaps, not be fanciful to attribute the increase in 1856 and 1857 to the business depression then prevalent. ²

The Less Attractive Aspects of Factory Work—The seamier side of life in a factory town, even in the era when the population of working people was more nearly homogeneous than now, was not without expositions that serve as a corrective to the excessive laudation that was indulged in by distinguished visitors and by professional beneficiaries of the factory system. An anonymous writer in the "Vox Populi," whose literary style was not unlike that of Benjamin F. But-

ler, replied in a series of articles to Dr. Huntington's eulogy of the conditions in which the factory operatives worked and lived. These articles of 1843 were collected and published in pamphlet form under the caption of "Corporations and Operatives: Being an Exposition of the Condition of Factory Operatives, and a Review of the 'Vindication,' by Elisha Huntington, M. D., Published at Lowell, 1841. By a Citizen of Lowell." This document was printed by Samuel J. Varney, whose journalistic adventures for several years kept Lowell people on the *qui vive*. If only as a matter of record some of the findings, so variant with those of Bartlett and Miles, of Dickens and Scoresby and Trollope, should be summarized.

The general attitude of the critic of Dr. Bartlett's earthly paradise is indicated in the following passage from his preface:

Recent events have occurred which have awakened an inquiry among the operatives as to what the Rights of humanity demand. The latest reduction of wages has withdrawn the veil that has been spread over the factory system, and the operatives have opened their eyes, and with surprise beheld the true character of the agents and managers of the mills, who have been pretending so much kindness and fatherly regard for them. They now behold them as they really are at all times, the paid agents of the hard-hearted money changers, and a gold-worshipping and poverty-oppressing aristocracy. * * * There are two distinct, leading interests lying at the bottom of things in this city. The one is the interest of the combined wealth of the Corporations and the other is the interest of the great mass of the People, living in Lowell, but who receive no share of the large dividends made by the manufacturing interests. * * * On the one part are the people of Lowell, male and female, who live here and whose labor and exertions here support themselves and furnish large dividends to the non-resident stockholder. These interests are sometimes concurrent but generally opponent.

Of the operatives themselves and their aspirations toward social equality with the employing class the unknown author of the pamphlet says: "I desire their elevation to that station in the social scale to which their usefulness entitles them; and in their name I demand that such improvements be made in their situation and condition as shall secure to them their just share of the products of their own labor." His prime query is "whether those who do the labor that produces the wealth that is here created receive as a compensation for their labor their just proportion of the profit, according to the sweat and toil, and time by them contributed to the enterprise. And in the next place,—is the moral, intellectual and physical condition of the operatives in the mills such as well informed persons would wish their children to be in? * * * The old theory that many should labor that a few may roll in idleness luxurious ease was long ago exploded. And the doctrine that the many should labor, that everyone is entitled to

honor and distinction, according to the merits of his work was established by the voice and blood of the patriots of the revolution."

The specific charges that followed the foregoing and other similar generalizations dealt largely with the conditions of housing of eight thousand females, mostly of ages fifteen to thirty. One of the hardships of living in the congregate way prevalent at Lowell, it was urged, lay in the perpetual restlessness of the life. There is no solitude for "minds eternally confused in the endless bustle and noise and gabble that is continually going on around them, and from which they cannot without inconvenience escape." The time allowed for meals was not long enough "to properly masticate a sufficient quantity of food for the healthful support of life." As for the conditions of sleeping, "three, four and sometimes, it is said, more beds are stowed into one room; and here, six, eight or more persons are obliged to sleep, inhaling and reinhaling the same air, thereby made poisonous and deleterious to health." The price of board, the writer asserted, was too low to enable the boarding house keepers to pay their bills and still set a proper table. The then price (in 1843) was \$1.37½ a week, representing an advance of twelve and a half cents over the figure at which it was originally set and which was so low that many boarding house keepers went bankrupt during the hard times of 1837-38. Even the new price was insufficient for providing good and wholesome food. The interest of the corporations was to keep it as low as possible, to excuse the low wages paid.

The sanitary situation in many of the boarding houses was stated by the critic to be bad. "Especially is this the case in respect to the beds and sleeping apartments. These, from unavoidable neglect, are often overrun with uncomfortable and filthy vermin, to the great annoyance of the poor suffering lodgers." For cases of sickness and indisposition the lodgings were ill provided. A limited number of operatives if seriously afflicted could be accommodated at the corporation hospital, but for those who were out of work with a slight ailment no provision whatever was made.

Although the present-day understanding of the effects of fatigue on the human organism had not been attained in 1840, something of the line of Louis D. Brandeis's argument that won the Oregon Laundry case before the Supreme Court was prefigured in the findings of this anonymous contributor to the "Vox Populi." He said:

The hours of employment, from the viewpoint of hygiene and mental equilibrium, were certainly unreasonably long. They averaged thirteen hours a day, to which must be added at least two hours for going to and from work and eating the hasty meals for the sake of which the work was interrupted. All but nine hours of the twenty-four, six days in the week, were devoted to the interests of the manufacturing corporations. In summer the working woman was called

from her bed at four-thirty and was at her work at five o'clock. On an empty stomach she labored for two hours and then, in a half hour intermission, slipped from the mill to her boarding house for a hasty breakfast. Then back to the factory until noon when three-quarters of an hour was allowed for dinner. The afternoon session continued until seven o'clock. By the time a girl had finished her supper it was eight o'clock, and in all probability she was so fatigued that she was glad to turn in half an hour later. The winter schedule was not less exacting. The operative on week days had practically no time to sew, mend or knit for herself, to write letters or read magazines and books, unless she considerably curtailed the hours which nature demanded for sleep. Fresh rosy countenances, in the circumstances, were hardly to be encountered in the mills. "When we see females devoting fifteen hours of their time in their daily employment, for a livelihood, and laboring incessantly nearly thirteen hours a day, and situated in such circumstances as we have pointed out, and subjected to the thousand other evils of a factory life, can we wonder if we see them fatigued and enfeebled and just able to drag their weary limbs from the mills to their boarding houses?"

Unfavorable facts of the factory system, according to the pamphleteer, were sedulously concealed by the agents of the corporations and their followers. There was in New England an organized combination of manufacturers who undertook to keep wages low. The corporations, at the same time, were often much troubled to secure help "to run all of the machinery. They are obliged to send agents into the country,—into Maine, New Hampshire, and Vermont, to tell partial and flattering stories of the prospects of factory girls. These agents they pay a stipulated sum per head for hiring girls and bringing them here to keep their machinery in operation. * * * The plan is, to seize upon every possible means to circulate and give currency to the idea that a manufacturing village in New England, and Lowell especially, is almost an earthly Paradise, and a place particularly favorable for all persons, and particularly females, to improve in morals—in intelligence—in health—and in all the graces and refinements that adorn society." In this publication it was specifically charged that the much advertised "Lowell Offering," as written and edited by mill girls, was utilized by the mill agents as propaganda and that so far from this publication's being typical of the intellectual stimulus of a factory town it represented the efforts of not more than six regular writers and about twenty occasional contributors.

The first of the comparatively few strikes which Lowell has experienced occurred very soon after the incorporation of the municipality. It was not a very serious affair, as one realized from a rather amusing account of it written in 1876 by Mrs. W. S. Robinson: "The first strike, or 'turn-out,' as it was called, was in 1836, and was caused, of course, by the reduction of wages. The operatives were very indig-

nant; they held meetings and decided to stop their work and turn out and let the mills take care of themselves. Accordingly, one day they went as usual, and when the machinery was well started up they stopped their looms and frames and left. In one room some indecision was shown among the girls. After stopping their work they discussed the matter anew and could not make up their minds what to do, when a little girl of eleven years old said: 'I am going to turn out whether any one else does or not,' and marched out, followed by all the others. The 'turn outs' all went in procession to the grove on 'Chapel Hill' and was addressed by sympathizing speakers. Their dissatisfaction subsided or burned itself out in this way, and though the authorities did not accede to their demands, they returned to their work, and the corporations went on cutting down their wages."

Initial Restriction of Hours of Labor—The first real contest for shortening the hours of labor in Massachusetts factories began in 1850, with a proposal favoring a shorter day. By comparison with more recent legislation this measure would seem preposterously inadequate for its purpose. It was, of course, strenuously resisted by the corporations and many who were not specifically under the corporate influence believed in a general way that it was a good thing for the working class not to have much leisure. Nobody at that date understood how many evils, physical and mental, grow out of excessive fatigue superinduced by long hours of labor; nor was it appreciated that in the long run the human mechanism is most productive when operated with alternate periods of rest and activity.

On the reformatory side was the agile minded Benjamin F. Butler, who in 1852 made a campaign for the Legislature on this issue. It was unquestionable that the corporations were determined to head him off, for in various mills of the city was posted this notice: "Any man who votes the Ben Butler ten-hour ticket will be discharged." This attempted interference with the suffrage was resented and a great indignation meeting was held at which Mr. Butler is recorded as saying: "I do not counsel revolution or violent measures; for I do not, I can not believe that the notice posted in the mills was authorized. Some ignorant underling has done this with the hope of propitiating the favor of distant masters; misjudging them, misjudging you. The owners of the mills are surely too wise, too just, or at least too prudent, to authorize a measure which absolutely extinguishes government, which incites and justifies anarchy. For tyranny less odious than this, men of Massachusetts, our fathers cast off their allegiance to the king, and plunged into the bloody chasm of revolution; and the directors must know that the sons stand ready to do what their sires have done before them."

The young Lowell attorney was elected and the eleven-hour proposal became law.

First Setback to Lowell's Prosperity—Toward the end of its first quarter century of existence, Lowell for the first time began to suffer from an exodus of its inhabitants. This was a new experience. When the place was young and when opportunities for industrial employment were still very limited the pioneer factory town experienced only influx after influx of inhabitants. It was exceptional for people who had once established themselves in Lowell to go elsewhere. From the time, however, of the gold discovery in California began a process of constant dilution of the population by emigration which is still going on. The call of the West, of New York City and of newer manufacturing centres in New England has long been insistent, and consistent efforts have never been made to counteract it.

In recalling the first great commercial calamity of this kind, General Butler said at the centennial exercises in 1876: "Another cause which retarded our prosperity, quite frequently overlooked, came in the years 1848-49, and was the discovery of gold in California. Those listening to me past the middle age of life who can throw their minds back to that period will remember that that was quite the darkest time Lowell has ever known, and for the reason that in addition to the fact that the dividends earned here, just alluded to, were not spent here, the enterprise and spirit of our young men were drawn by stories of fabulous wealth to be had in California. During that fever we lost nearly 1,500 young and middle-aged men who left us for the Golden State, and they were among the best, most energetic and enterprising of our citizens, or they would not have had the energy to go."

Organization of Many Humanitarian Associations—As a city notably responsive to the influences of its time, Lowell could hardly have failed to become a centre of various humanitarian movements in the quarter century between its incorporation and the outbreak of the Civil War.

This era was one in which movements of what would now be called "uplift" became very prominent in the national consciousness, the period somewhat resembling the generations of American idealism between the opening of the Chicago Exposition and the participation of the Nation in the war of the nations in 1917.

The anti-slavery agitation, destined finally to bring the forces of modern capitalism and those of surviving feudalism into armed conflict, was only one of many that looked forward to the improvement of the conditions of living on the planet, some of them absurdly unscientific and empirical, but almost all of them grounded in sincerity and fine lofty altruism. This was the time of the Brook Farm and Red Bank efforts to apply the communistic principles of Fourier; of Josiah

Warren's equity mercantile enterprises; of the beginnings of Sylvester Graham and of almost countless "isms." In this period concessions to the common people were many, as in the abolishment of imprisonment for debt and the improvement of public schools.

The Period of "The Lowell Offering"—Emerson wrote of this era of the outflowing of New England transcendentalism: "The children of New England between 1820 and 1840 were born with knives in their brains." In many of them, certainly, the literary instinct was strongly developed. In the Lowell mills the "literary" girls might often be seen writing poetry on scraps of paper while still attending to their looms or spinning frames.

The idea of forming an association for literary purposes was first proposed in 1837 by Harriot F. Curtis. Out of her proposal grew an "improvement circle." Who its officers were is no longer recorded. It is known that Emmeline Larcom was secretary. Other improvement societies followed, so that in 1843 there were at least five in as many neighborhoods of the city. All who attended meetings were expected to bring a written contribution to be read aloud.

In 1839 the Rev. Abel S. Thomas and Rev. Thomas B. Thayer, pastors respectively of the First and Second Universalist churches, established improvement circles in their societies. Some of the contributions which were read at their meetings proved to be remarkably interesting. They were published by Mr. Thomas in pamphlet form under the title of "The Lowell Offering, a Repository of Original Articles, written by Females employed in the Mills." The first series, covering the contributions of four months, was issued in October, 1840. A brisk demand for the booklet at once appeared. To meet this a new review, "The Lowell Offering," probably so-called, now began to be printed. It was usually of thirty-two pages and was issued under the church auspices until October, 1842, when Miss Curtis and Harriet Farley took it over, and thereafter assumed responsibility for it. The story of the career of this famous magazine and of some of its contributors is told at greater length in a special chapter on Lowell authors in this history.

Growth of the Middlesex Mechanics' Association—The ante-bellum years were the time of the Mechanics' Association's greatest prosperity.

It used to be a source of boyish wonder, in the seventies and eighties, just what the Middlesex Mechanics' Association and its excellent library in Dutton street had to do with mechanical affairs. In conspicuous positions hung several rather awe-inspiring full-length portraits. These were obviously not portraits of mechanics—at least not of mechanics of the present-day type. The library was of a generalized sort, and the well-informed librarian was not one to whom one

would turn for information about gears, shafting or high-speed steels, however helpful she might be in selecting a historical novel or bringing forth material for debating society use. Most of those who used the library seemed not to be of the mechanic sort, but rather to be people who preferred its quiet exclusiveness to the democracy of the public library. The Mechanics' Association of 1885—that is only a recollection of a personal impression—appeared to be one of the institutions of Lowell in which an overalled mechanic would be particularly ill at ease. The Middlesex Mechanics' Association was, in fact, something of a Lowell analogue of the Boston Athenaeum.

That the recession from original intent came early in the history of the association is well established. As an organization composed exclusively of men engaged in the mechanical trades this association almost "died a-borning." As a clearing house of literary and scientific culture it led a notably useful existence for sixty years or more. It was at the height of its influence and prestige just before and during the Civil War. In the latter decades of the century its day had plainly passed and its dissolution was as clearly foreseen as regretted.

The association, as already noted, was incorporated in 1825, upon petition of some eighty mechanics of the then manufacturing village of East Chelmsford. The name conveyed a suggestion of the original intent of the association. It was expected that a membership of mechanics of Middlesex County would be enrolled. The first meeting was held October 6, 1825, at "Ira Fry's Inn," which stood in Central street on the site of the present American House. "We aim to be just," was adopted as the association motto. It was decided to charge an admission fee of three dollars and thereafter quarterly assessments of twenty-five cents. A somewhat grandiloquent statement of the aims and objects of the organization may be noted in "An Address Delivered before the Middlesex Mechanics Association at the Anniversary, October 4, 1827," by Ithamar A. Beard. The peroration of this oratorical effort may be worth quoting: "This association was formed for the mutual benefit of its members; for the improvement of their morals; and for the good of society generally. May we be an example to others of temperance, frugality and industry; of a charitable disposition towards others, and of quiet peaceable citizens. May no disgraceful action characterize any of its members; and may we aim at the general good of society and our own mutual improvement. In doing which I would recommend that the Association meet more frequently than we have done heretofore, and statedly enter into the discussion of some useful topic that will serve to improve the mind, make us more intimately acquainted with each other and more firmly unite us by the stronger bonds of interest and friendship."

Presumably the workers for whom and by whom the association

was founded did not respond as expected to invitations to join. In December, 1827, at all events, a vote was passed to the effect that "manufacturers are considered mechanics and may be admitted."

This action, which was not adopted without opposition, began a long series of discussions and controversies concerning the conditions of membership.

In February, 1834, it was voted that "an attempt should be made to raise the character of this association and to form it into an active and useful association." In pursuance of this motion the by-laws were radically changed. An admittance fee of twenty-five dollars was established, representing a share which was transferable. An appeal was taken to substantial citizens and some 220 new members were voted in. It was also purposed to raise money for a building. This plan was furthered by the gift, in August, 1834, of a lot of land in Dutton street, valued at about \$4,500, which the proprietors of the Locks and Canals deeded over to the association. By sale of shares the members meantime raised about \$7,000 and started in to build a structure of which the total initial cost was about \$20,000. In this undertaking Kirk Boott took great interest. In its new quarters the association became an institution of much moment to the city. Its Lyceum lectures for many years brought to Lowell the best speakers of the day. The library and reading room had a very general use.

Opening of Hospital and Dispensary—Among humanitarian institutions whose foundation date back to the first days of the city, none is more striking in equipment than the Lowell Corporation Hospital, whose fine Ionic portico is one of the landmarks of the city. This hospital originated in 1839, when the several manufacturing companies purchased the mansion which Kirk Boott, then lately deceased, had erected on the old Tyler farm and had afterwards removed to the head of Merrimack street. The cost to the companies of purchase and alterations was about \$20,000. The building was devoted to the needs of operatives who were ill. A resident physician was appointed and the spacious living rooms and chambers converted into wards. The charges were set at four dollars a week for men and three dollars for women. Those patients who were able to pay settled directly with the superintendent; those unable to do so referred their needs to the corporation agent, who became responsible. Of the expenses of the hospital the corporations in the first years paid about two-thirds. The number of patients in the forties averaged about 150 annually.

The Lowell Dispensary, another fine charity, was incorporated in 1836, having as its object to help the poor by affording medicines and medical attendance gratuitously. It employed two physicians, each with a section of the city under his charge. All subscribers to the

support of this institution commanded the services of the physicians in behalf of the sick poor.

The Howard Benevolent Society was organized in 1840. It aimed to "afford encouragement and aid to the moral and industrious poor." A board of trustees was divided into subcommittees of two persons to each ward of the city. On proper recommendation the society was to make gifts or loans of articles necessary for relief of distress.

The ministry at large, a model non-denominational religious institution of Lowell, was established in 1844 at the instance of the South Congregational Society (Unitarian) and in accordance with a plan devised by Rev. Dr. Tuckerman, in Boston. The object was to minister to the temporal and spiritual needs of persons not reached by the existing religious societies. Regular services were held each Sunday in the Hamilton chapel on Middlesex street. No collections were taken and no pew rents exacted. A Sunday school of about one hundred children was soon enrolled. The ministry at large began at once to employ a minister who gave most of his time to relieve suffering among the poor. The annual reports of the first years are excellent examples of descriptive writing and valuable sources of information as to economic and social conditions in the city.

New Churches in the Pre-War Period—The multiplication of Protestant churches between 1836 and 1860 in the city of Lowell seems as remarkable as are the present difficulties with which many of them are beset. The community was composed almost entirely of church-going people, most of whom were of the old Puritan stock. A man or woman who had no religious affiliations was under suspicion of being a bad citizen.

The Congregational churches in especial were spread over the community to an extent that at a later date proved embarrassing.

The Second Congregational Church, the predecessor of the present Eliot Church, began its services under the town government. Its first church building, in Appleton street, the one which was afterwards sold to the First Presbyterian Church, was dedicated July 10, 1831. The first minister was Rev. William Twining, ordained October 4, 1831. In 1837 came Rev. Uriah Burnap, who remained with the church until he died in 1854. Mr. Burnap was succeeded by two ministers of comparatively short pastorates: Rev. George Darling, who stayed two years and then accepted a call to Ohio, and Rev. John P. Cleveland, who resigned to become chaplain of the Thirtieth Massachusetts Regiment.

In 1839 it appeared that still another Congregational church was needed, and on March 11 of that year the men members of the First and Second societies met and voted that "it is expedient to form immediately a new church." It was resolved that "from each church should

be taken, to form the new church, not more than twenty-five males and one hundred and fifty females from both churches."

This arrangement was the beginning of the church in John street, now defunct, which for many years was one of the strong centres of orthodox Congregationalism in Massachusetts. Under date of February 22, 1839, John Aiken, Royal Southwick and Jesse Fox were incorporated as "Proprietors of John Street Church in Lowell." These proprietors, together with A. L. Brooks, David Sanborn, and Edward F. Watson were chosen as a building committee. Land was bought of the Locks and Canals Company at two shillings a square foot. The church building cost \$17,884.12. It was dedicated January 23, 1840, with a sermon by Rev. Amos Blanchard, of the First Church. A call was extended to an Andover student, Stedman W. Hanks, a graduate of Amherst College, who was installed as pastor March 20, 1840.

A crisis in Mr. Hanks' pastorate, the story of which has been related by the Rev. George H. Johnson, afterwards minister of the church, was typical of the controversies of the time. The new minister was a pronounced anti-slavery and temperance advocate, and he soon was in trouble because he preached on these moral issues instead of confining himself to "pure religion." As Mr. Johnson says, "his course speedily gave offence to the staid and conservative elements of society; the church came to be designated as 'Texas,' and it was said that the subjects considered at its meetings were 'rum and niggers' instead of the Gospel. After much consultation a council representing twenty churches was convened to advise whether the zealous young pastor should be dismissed. All the deacons were opposed to his remaining; on the other hand the women of the church stood loyally by their pastor, ninety-seven being in his favor to thirteen against him. The result of the council's deliberation was in favor of Mr. Hanks, and the opposition to him was gradually won over by his steadfast spirit and by a real zeal for the prosperity of the new church enterprise. A marked revival of religion followed this reconciliation; large congregations attended the services and the Sunday school, containing over 700 members, was said to be the largest in the State. An addition of over 100 new members on a single Sunday, and a contribution of more than \$700 at one collection, showed that the new church had outlived the spirit of dissension, and from that time to the present no dissension between the pastor and people has marred the usefulness of the organization."

Rev. Mr. Hanks was dismissed from the pastorate at John street church in October, 1852. He had served the church nearly thirteen years during which he had welcomed into its membership 627 communicants.

The second John street pastor was the very distinguished Rev.

Eden B. Foster, born at Hanover, New Hampshire, in 1813, being one of eight brothers of whom seven were graduated from Dartmouth College and six became ministers. When called to Lowell, Dr. Foster was minister of the church in the nearby town of Pelham. His installation took place February 3, 1853. He served the church during two pastorates, the first extending to 1861 and the second between the years 1866 and 1878, in which latter year he was made pastor *emcritus*. He died April 11, 1862. His first pastorate was one in which he took a decided stand against negro slavery.

The fourth Congregational church to be organized within the present city limits was that in Kirk street. On April 22, 1845, James Buncher and fifty-five other members of the First Church petitioned for dismissal in order that they might start a new church. On May 2 the petition was granted. The church started with 157 members. It was voted to call Rev. Amos Blanchard, then pastor of the First Church, at a salary of \$1,000. This call was accepted on May 17 and four days later Mr. Blanchard was dismissed from his former pastorate to take up his new one. Services were held at first in Mechanics Hall and a Sunday school was formed. Later the place of worship was changed to City Hall, where services were held for about a year.

A location for the new church in Kirk street was decided at a meeting of June 30, 1845. The church building, which has since been torn down to make room for the high school extension, was dedicated December 17, 1846. Its total cost was \$22,679.12, including \$1,800 for an organ and \$3,805.13, the cost of the land. The pews were assessed at \$3.500 per annum and were auctioned on Christmas Day.

Rev. Dr. Blanchard, who was called to the Kirk street church before it was built, stayed with it down to his death, January 14, 1870. He was born at Andover, March 7, 1807, and was graduated from Yale College, and from the Andover Theological Seminary. His first ministry began at the First Church in 1829, so that his entire professional career of more than forty years was spent in Lowell. Early deacons of the church were John Aiken, elected 1845, but declined to serve; Sewell G. Mack, elected 1845 and resigned May 28, 1895, after fifty years' service; James Buncher, elected 1845, but declined to serve; Samuel Stickney, elected 1845 and died 1875; James Buncher, elected 1847 and resigned 1864 on account of leaving the city; Nathaniel Bartlett, elected 1847 and resigned 1864. Superintendents of the Sunday school before 1860 were: Samuel W. Stickney, 1845; T. L. P. Lamson, 1849; Aaron Walker, 1850; Josiah G. Coburn, 1851; Andrew Moody, 1853; Samuel W. Stickney, 1853.

Singing by the church congregation originated at Kirk street church, so far at least as New England is concerned, according to reminiscences related in June, 1875, in a sermon preached by Rev. C. D.

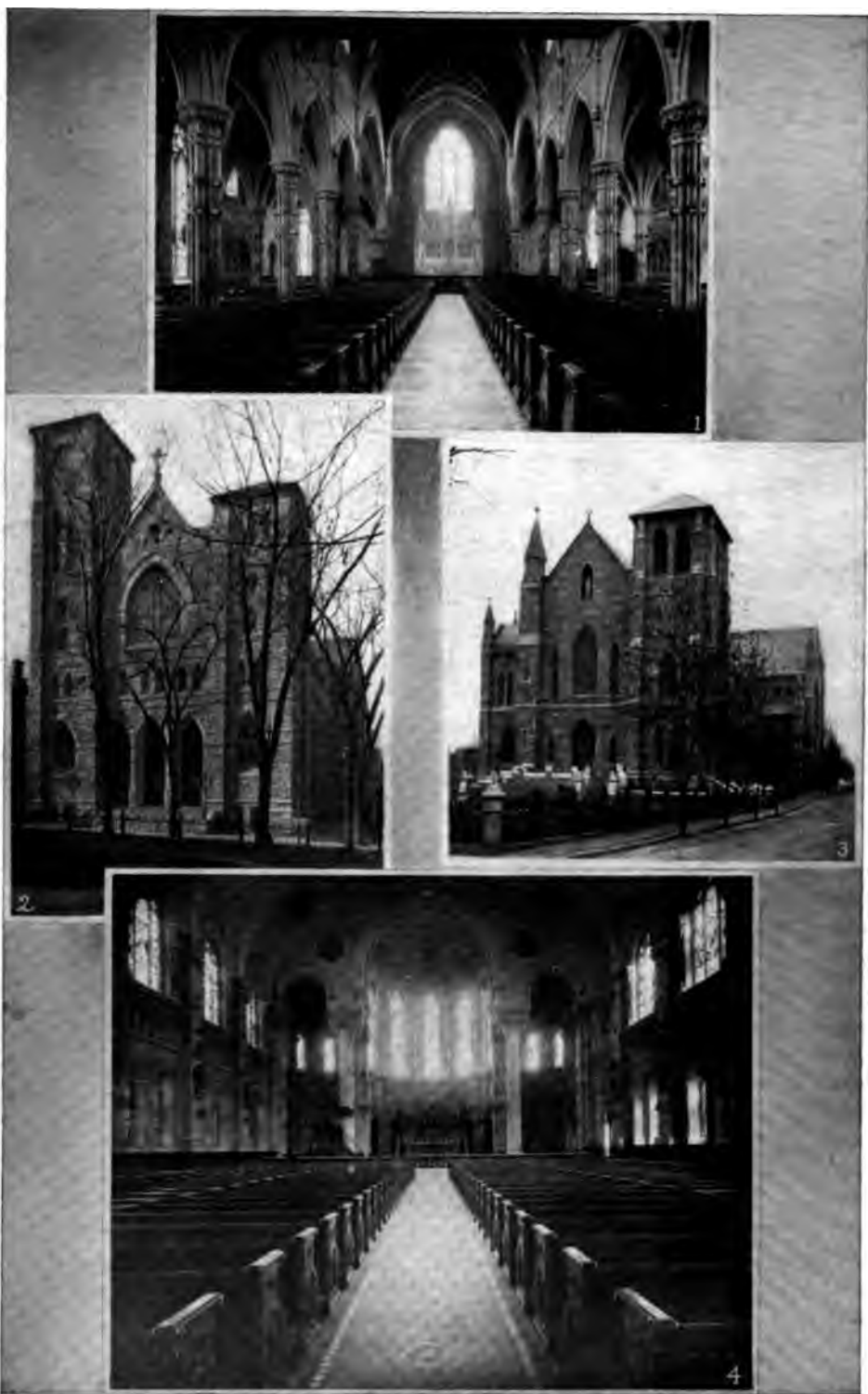
Barrows in commemoration of the thirtieth anniversary of the founding of the society. "This was the first city in New England," he said, "that introduced congregational singing into its Sabbath services, and Boylston was the first tune upon which the experiment was tried. It happened that the pastor was preaching in exchange the second Sabbath of the trial, and the officiating clergyman, after reading the hymn, was so surprised at seeing the audience rise and begin to sing, that he quite forgot his ministerial dignity, and his gravity gave way to a generous smile as, unable to take his seat, he stood chained to the spot—but whether by the superiority of the music or by the unexpected volley from the audience was never clearly known."

The crowded condition of John Street Church presently led to a movement on the part of those members living in Belvidere to organize a society of their own. The High Street Congregational Church accordingly was organized January 22, 1846, with seventy-one members, of whom fifty-two came from John Street and the others from elsewhere. The original incorporators were Erastus D. Leavitt, Artemas L. Brooks and John Tuttle. Major Atkinson C. Varnum states that "The enterprise of establishing a fifth Congregational church in Lowell, to be located on the east side of Concord river, seems to have been suggested by the failure of St. Luke's Protestant Episcopal Church (which was incorporated February 25, 1842), and the feeling that the field should be occupied by some Protestant denomination." The first meeting of the society was held in the vestry of John Street Church, July 7, 1845, Nathan Crosby acting as moderator. Arrangements were made to purchase the unfinished edifice known as St. Luke's Church on December 4, 1845. The first pastor was the Rev. Timothy Atkinson, installed February 25, 1846. He was followed on December 15, 1847, by Rev. Joseph H. Towne, who after seven years was succeeded by Rev. Orpheus T. Lamphear, whose stay was only a year. On September 15, 1857, came Rev. Owen Street, D. D., who remained until his death May 27, 1887.

St. Luke's Church, which the High street congregation acquired as a church home for \$7,500, represented an unfortunate attempt to establish an Episcopal church in Belvidere with insufficient financial support. In the late thirties the attendance at St. Anne's Church had increased so fast that another Anglican church was proposed. Services were held for a time in a room in the Wyman Exchange, with Justin T. McCay as minister, and with music directed by George Hedrick as a volunteer organist and choir director. The room was soon overcrowded, and Mr. McCay felt that the time was at hand for a new edifice. Against the advice of some of his supporters he circulated a subscription list and obtained money enough to buy the lot of land in Belvidere and to erect the present structure, which was heavily mort-

gaged. The church was first occupied in 1841. The attendance, which had seemed overwhelming at the room in the Wyman Exchange, failed to fill the pews. The financial support which Mr. McCay had confidently expected from the manufacturing corporations ~~was~~ for some reason or other withheld. The prospect steadily grew more discouraging, and in 1845 the opportunity to sell to the newly organized Congregational body was welcomed.

A Third Congregational Church, which was started in June, 1832, came to an end soon after the incorporation of the city. This society, whose struggling existence of about six years has been generally forgotten, was initiated, like several others to follow, by reason of the crowded condition of the pews in the First Church. To Major Varnum the late Deacon Samuel B. Simonds contributed some reminiscences from which it appears that the society began with eighty-three communicants. The first preparatory lecture and communion service was ministered by the Rev. Daniel S. Southmaid. On December 18, 1832, a call was extended to Rev. Charles Kittredge to settle "at a salary of \$700 the first year, to be increased \$300 when the resources of the church would admit." This call was declined. After two other clergymen had refused to come, Rev. Giles Pease, of Coventry, Rhode Island, accepted the invitation. He was installed October 2, 1833. Public services were maintained in a building at the corner of Market (then Lowell) and Suffolk streets. In 1833 financial irregularities of the treasurer compelled the society to give up its building and hold meetings in the town hall. The embarrassment continued and the church made an appeal to the community for help in buying a theatre that had been constructed on Market street, just above Worthen street, and which the owners would sell for four thousand dollars. "Considerable aid," it is related, "was furnished by people who were not especially interested in the church, but were willing to be rid of the theatre." A large audience assembled at the first religious services in this building, "owing in part to the fact that one Henry Patch had circulated the report that 'a performance would be given that evening at the theatre'." The attendance presumably did not continue to be satisfactory, for in 1834 the society adopted the free church system under the style of "The First Free Church of Lowell." The former name of the Third Congregational Church was resumed in 1837. Meantime, on May 31, 1836, Mr. Pease had resigned. In 1837 members of the church sent a communication to the other churches of the city stating explaining their embarrassed financial condition and asking advice as to the proper course to pursue. No records have been found to show what reply was made to this communication, but it was Mr. Simonds' recollection that in the spring of 1838 the remaining



1. INTERIOR VIEW OF ST. PATRICK'S CHURCH.
2. ST. PETER'S CHURCH.
3. IMMACULATE CONCEPTION CHURCH.
4. INTERIOR VIEW OF ST. JEAN BAPTISTE CHURCH.

members voted themselves letters of dismission to other churches of their choice.

The Second Universalist Society, later known as the Shattuck Street Universalist Society, grew out of a meeting of May 22, 1836, in City Hall, at which Rev. J. G. Adams was preacher. He officiated four Sundays and then a meeting was held in Mechanics' building to consider whether or not it was advisable to organize a society. A committee reported that it was so expedient, and accordingly, on September 4, 1836, about one hundred men and women signed the preamble and constitution. The first pastor, the Rev. Zenas Thompson, was installed February 5, 1837. The first annual meeting was held March 27, 1837, at which Solon D. Pumpelly was chosen chairman; David Tapley, treasurer; W. B. Davis, collector; Isaac Place, James C. Hill, Hale Clement, Otis Bullard and Holland Streeter, prudential committee.

St. Peter's is Lowell's second oldest Roman Catholic church, and dates its beginning from the year 1841, St. Patrick's from 1831. When it was deemed important that "Chapel Hill," as the Gorham, Green and William streets section was called, should have a church of its own, there was a great deal of opposition among the parishioners of St. Patrick's, and a special meeting was called in 1841, at which Bishop Fenwick, of Boston, presided. Bishop Fenwick was impressed by the speeches of those favoring a second church, and finally, to test their sincerity, he asked for all who would contribute \$100 to a building fund to indicate it by rising. He received such a hearty response that the debate was ended without further argument, and a second parish was decided upon.

As a result, a plain brick church edifice costing about \$22,000 was dedicated in September, 1842, that church standing at the corner of Gorham and Appleton streets. Services were first held in the church on Christmas Day, 1842, Rev. Father Conway being the first pastor of the new parish, which was named in honor of St. Peter. At the dedication the pews sold at a high price, those nearest the altar bringing \$200 and more, each purchaser receiving a deed signed by Bishop Fenwick. The new parish was under Father Conway's care until 1847 and prospered. Failing health compelled Father Conway to take a vacation, Rev. Peter Crudden being appointed to fill the pastorate during his absence. Later Father Crudden was appointed pastor of St. Peter's, Father Conway going to a Salem parish. Father Crudden continued as pastor until the summer of 1883, many parish activities dating from his pastorate, one being St. Peter's Orphan Asylum on Appleton street, near St. Peter's Church, built and placed in charge of the Sisters of Charity, whom he introduced to the city.

Rev. Michael Ronan succeeded Father Crudden, August 8, 1883.

and greatly improved the church by enlarging the basement to the full length, putting in new lights, a new organ and a handsome new marble altar, the basement being reconsecrated on Sunday, December 10, 1883. As the parish grew and prospered a new and larger church was imperative, hence the old site was not considered desirable, and the present one on Gorham street was decided upon. Arrangements were made to sell part of the land upon which the church stood to the United States Government as a site for a new post office building. But there was strife among the sections of the city as to which should secure the new Federal building, the Massachusetts Corporation finally offering a free site in the section they favored. There was quick thinking done to meet this, but St. Peter's countered with a duplicate offer, and the present site of the Federal building, the old St. Peter's site, was presented to the Government. This was accomplished by the formation of the Lowell Land Company, who bonded both church and rectory, the plan being to keep the rectory lot for an investment, open a subscription to pay for the church lot so that it might be presented to the Government, those in the movement expecting to be reimbursed by the increase of land values in the section surrounding the new Federal building. When all was settled, it was necessary that the church be at once torn down, the work of destruction beginning May 20, 1890, forty-seven years having elapsed since its dedication in 1842. The site for a new church was secured on Gorham street, just opposite the court house, the lot being large enough for both church and rectory. It was decided, however, to erect a temporary wooden church nearby, that building, seating 1,500 people, being finished and first used for service, Sunday, April 27, 1890. The plans for the new church were finished, and the rectory, begun a year earlier, was completed in 1891, and the foundation of the church finished in 1892. The formal cornerstone laying was on Sunday, September 11, 1892, in the afternoon, Archbishop Williams laying the stone, Dr. Garrigan, of the Catholic University, Washington, D. C., preaching the sermon. The church, one of the most beautiful in the archdiocese of Boston, was finished in 1900. The building is of granite, designed by P. C. Keely, of Brooklyn, of Campanello Gothic order of architecture, its greatest length, one hundred and ninety-six feet, its greatest width, ninety-one feet. The Nave is eighty-five feet wide, height from floor to ceiling, sixty-seven feet. One of the towers fronting Gorham street is one hundred and ninety-six feet in height, the other, one hundred and seventy-six feet, with base diameter of twenty-six feet. There are five altars in the church and five in the lower chapel.

Father Ronan's labors were ended by his death in July, 1909, and on August 18, 1909, Rev. Daniel J. Keleher, Ph. D., was appointed his successor. With his coming a new order began for St. Peter's. The

church, like the professions of law and medicine, has her specialists, and among her sons are great preachers, great pastors, great church builders, and great educators. Father Ronan was a great church builder, and that he did his work well, magnificent, beautiful St. Peter's testifies. With the church completed came the era of another specialist, the educator, in the person of Rev. Daniel J. Keleher. He was a man of learning, a college professor, an experienced pastor, and wholly consecrated to the work to which he had devoted his life. He came to the parish in the heat of the summer, and in addition to the ordinary burdens of a large parish, found himself confronted with three grave problems, each calling for quick solution. These were: To provide a school for the children of his parish; to provide a distinct parish for the members of St. Peter's Church living in the Highlands, it being a hardship for women and children to take the long walk necessary to reach their place of worship; to relocate St. Peter's Orphanage, and in freer, more healthy quarters, and amid better surroundings, carry forward the purposes of the institution. How well Dr. Keleher solved his problems, the admirably-located and modernly-built school where six hundred children in six grades are daily taught by the Sisters of Charity, of Halifax, answers the first; St. Margaret's in the Highlands is the answer to the second; and the healthful surroundings, amid which St. Peter's Orphanage under the direction of the Sisters of Charity, who care for the needy children in the splendid Stevens street home, answers the third.

In selecting a site for St. Peter's Parochial School, he chose the lot upon which stood the temporary church used during the building of St. Peter's, a lot bounded on three sides by Gorham, Union and Linden streets, and on the fourth by St. John's Episcopal Church. Plans were drawn for a modern building, three stories and basement, and on May 1, 1912, ground was broken, the same year the cornerstone was laid, and in September, 1913, the beautiful light brick building, modernly built, lighted, warmed, ventilated and equipped, with every sanitary precaution taken to insure health and comfort, was opened. The Sisters of Charity of Halifax have charge of the school. In appearance the building speaks volumes of praise for those responsible, and in utility it possesses the best in modern school room designing and furnishing. The lower grades, one and two, were first admitted, another grade was entered, and another room opened each year, until now six grades are receiving instruction in as many rooms on the first and second floors. Soon the entire building will be occupied, and about nine hundred pupils in daily attendance.

The question of relief for that part of St. Peter's congregation living in the Highlands was at once taken up by Dr. Keleher with Archbishop, now Cardinal, O'Connell, and the setting off of a new

parish strongly advocated as an act of justice to those members. The bishop approved, the lines of the parish were defined by him, and Dr. Keleher was authorized to select a location. He chose the property on Stevens street upon which the church stands, the home of the then owner now being the church rectory. The purchase price, \$7,000, was paid in full by St. Peter's. In 1910 the parish of St. Margaret's was erected, and a pastor appointed.

The removal of St. Peter's Orphanage from contracted quarters and undesirable surroundings was a subject that directly challenged Dr. Keleher's interest, and aroused his determination to improve conditions. The building, then situated on Appleton street, had been transformed from an old dwelling in a location which had become most undesirable. The Orphanage, founded in the fall of 1865, was opened by Sisters of Charity on November 23, of that year. Later the institution was placed in charge of the Nazareth Sisterhood, and came under the care of the pastor of St. Peter's.

Father Ronan inaugurated a greatly improved condition, and from the receipts of a great fair held in Lowell paid the debts which had accumulated, and placed the Orphanage upon a sound basis. During the years of his pastorate which followed, he created a fund from bequests and donations, which at his death amounted to \$20,000, which was used in relocating the Orphanage and building. On December 18, 1910, land was bought at No. 530 Stevens street, the old property on Appleton street was sold, the purchase price added to Father Ronan's fund, and both used to defray in part the cost of the new buildings erected. After the sale of the old building, possession being at once demanded, quarters were found in the newly-erected building owned by the Shaw Stocking Company, which was used until the completion of the new home. The business administration inaugurated by Father Ronan has since prevailed, the children of the Orphanage, about one hundred and thirty, are cared for under the best conditions, and Sisters of Charity are in charge, under the supervising care of the pastor of St. Margaret's and general direction of the pastors of the Catholic parishes of the city.

No vital interest of St. Peter's has been neglected in bringing about the solution of these problems, on the contrary, the parish, under Dr. Keleher, has prospered materially and spiritually, and in the many ways not visible to the unthinking but to those who can discern are the truest measure of a pastor's success. He is a profound and learned theologian, an eloquent preacher, possessing a fine voice and commanding presence, a cultured Christian gentleman with a pleasing personality which wins the love and respect of all who come within the circle of his influence. He is a strong advocate for any cause he may espouse, and numbers his friends among all classes. He

is a member of the Lowell Board of Trade, and interested in all movements tending to the betterment of the city and the cause of the common good. It is in keeping with this spirit that he so warmly advocates the cause of temperance, his long continued labor as chaplain of the Mathew Society resulting in great good. He has also interested himself in the Society of San Antonio, an Italian social and beneficial society, and in many ways his influence has been exerted for the good of his fellow-men outside of his priestly duties. Many substantial improvements to the church property have been made during Dr. Keleher's pastorate, amongst others, the purchase in May, 1910, of the residence immediately south of the rectory and the removal of the buildings, and the addition of the site to the grounds surrounding church and rectory. In 1916 the building north of the church was removed and the site added to the church grounds. In 1915 a beautiful estate, at the corner of Highland and Thorndike streets, was purchased, and a convent opened. In 1916 the adjoining property was purchased, and after extensive alterations and improvements, was joined to the former, and now both are occupied by the Sisters who teach in the school.

There is nothing in the history of St. Peter's parish of which the people are more proud than that it is the home of Cardinal O'Connell, for here he was born, and here he spent his childhood and youth, and even in those early days gave promise of his great career.

The many activities of Rev. Theodore Edson at St. Anne's and of his devoted parishioners kept that church in the forefront of the city's life.

At the Unitarian church, Rev. Henry Adolphus Miles continued his enlightened and scholarly ministry during a period of sixteen years down to May 30, 1853, when he resigned to become secretary of the American Unitarian Association. He was succeeded by the Rev. Theodore Tebbetts, whose pastorate, interrupted by ill health, lasted only ten days and who was followed by Rev. Frederick Hinckley, whose ministry continued until October 3, 1864.

The first cemetery to be opened after the incorporation of the town of Lowell was the Old Lowell Burying Ground on Gorham street, just opposite the former fair grounds. The first grave in this was dug August 15, 1835. It is still kept up, though of late years there have been but few interments.

The Lowell Cemetery, occupying some eighty-four acres of land near the Concord river to the south of Fort Hill, was laid out by a corporation chartered March 8, 1841. The original officers were: President, Oliver M. Whipple; treasurer, James C. Carney; clerk, Charles Hovey; trustees, John Aiken, James Cook, Jonathan Tyler, Samuel Lawrence, John W. Graves, Seth Ames, John C. Dalton, Alex-

ander Wright, David Dana, Eliphalet Case, John Nesmith and William Livingston. The cemetery was dedicated June 20, 1841, with exercises of great solemnity. There was singing by the Lowell Union Singing Society, J. C. Aiken, conductor. Rev. Lemuel Porter offered the prayer. The dedicatory address by the Rev. Amos Blanchard was long remembered for its eloquence and rich imagery. The consecrating prayer was made by the Rev. Henry A. Miles and the benediction delivered by the Rev. Mr. Packard, of Chelmsford.

The Catholic and Edson cemeteries were opened in 1846 in the sandy plain across Gorham street from the fair grounds.

Social Life Before the War—Socially, Lowell continued to be—much as it was under the town government—a community of delightful homes. Cultivated people kept alive the arts and sciences. Of gayety there was enough. Suggestive testimony to the social charm of the city's first years was offered by Judge J. G. Abbott, in a letter read at the centennial celebration of 1876. This jurist, whose residence in Lowell ended just before the Civil War, wrote:

My acquaintance with Lowell began in the latter part of 1834, when it had a population, I believe, of about twelve thousand. I think all who lived there at that time and for the next twenty years, will agree with me that in saying that no city of its size ever contained more remarkable people or [was] a pleasanter or more cultivated city. I doubt if any place of as large a population ever had within its borders a larger number of very able men who would be marked and remarkable in any community.

The reason of it was, I think, that for some years our state had not been especially progressive or prosperous, but on the contrary quiet and even languishing. Our lands, for agriculture, could not compete with the abundant fertility of the West. Our commerce had been paralyzed by the war with England, and was slow in recovering. Lowell was the real beginning of a new epoch for our state. Here was an opening for men of energy, power and activity who had been waiting for an opportunity—and it was improved.

Lowell's Wealthy Men of the "Fifties"—Who the Lowell men reputed to be wealthy were in 1851, together with some notes on their personal characteristics, came out in an entertaining publication written by A. Forbes and J. W. Greene, with the title of "The Rich Men of Massachusetts, containing a Statement of the Reputed Wealth of about Fifteen Hundred Persons, with Brief Sketches of more than one Thousand Characters."

One of the features of this compilation was its emphasis on the benevolence, or lack thereof, of the well-to-do persons listed, the belief of the authors being that an increasing jealousy of the poor regarding the rich might be dissipated if the latter all gave liberally to good causes. They expressly state that when nothing in their notes is said

concerning a person's benevolence the reader should not conclude that this man never gives, but simply that he has not acquired among his fellow-men a reputation for being liberal.

The following were found to be the indubitably solid men of Lowell, with their ratings and, in some instances, their personal characteristics: Adams, Joel, \$100,000. Began with small means. Lawyer by profession. President of Prescott Bank. Bartlett, Homer, \$100,000. Native of Granby. Graduate of Williams College. Studied law with Hon. Daniel Noble, Williamstown. Cashier of Ware Bank and agent of Ware Manufacturing Company. About 1839 appointed agent of the Massachusetts Cotton Mills, Lowell. "Mr. Bartlett is a remarkable demonstration of what can be effected by application, untiring perseverance, and inflexible integrity. He commenced without a cent, and with but a partial allowance from his father to defray the expenses of his classical education, and even this pittance he has long since refunded. He enjoys the unqualified respect of the citizens of Lowell." Carter, George, \$100,000. Began a poor boy, but received something by marriage. Apothecary. "A very industrious, prudent man and much given to acts of benevolence." Fiske, William, \$100,000. Commenced in Lowell poor. Carpenter. "Energetic man and very benevolent." French, Benjamin F., \$100,000. Mostly inherited. President of Railroad Bank. Livingston, William, \$100,000. Began a hard-worker, digging, jobbing, etc. Has a lumber wharf and deals in coal, lime and grain. "Made twenty thousand dollars one year by selling grain at a profit of two cents on the bushel. Had no education to begin with. A man of very fair benevolence." Nesmith, John, \$200,000. Nesmith, Thomas, \$100,000. The account states that these brothers were poor farmer boys at Wenham (sic), and that they "accumulated their money in trade and speculation." Rogers, Zadoc, \$100,000. Inherited. Farmer. Old bachelor. Southwick, Royal, \$100,000. Small portion by inheritance and marriage. Manufacturer. "Smart, enterprising man. Benevolent where he likes, and this quality in him is often rendered more active by a very benevolent wife." Tyler, Jonathan, \$100,000. "Commenced poor. Accumulating by saying 'No.' Obtained an acre in the heart of Lowell for a mere trifle many years ago, and would never sell an inch of it." Whipple, Oliver M., \$200,000. "Commenced as a common hand in a powder mill. Came to Lowell with pack on his back. Is now an extensive powder manufacturer." Wright, Nathaniel, \$100,000. Lawyer and former mayor. "His wife is very benevolent, and he 'don't object to it'." Wyman, William W., \$150,000. "Mostly inherited."

Considerable interest in literary production has always characterized Lowell families. Apart from the authors and editors of the "Lowell Offering," which excited Charles Dickens' admiration, there

were, as elsewhere noted, several writers of reputation living in the city at one time and another before 1860. One of the most prominent of these, socially, was Mrs. Jane Ermine Locke, for some years a correspondent of the "Boston Daily Journal" and "Daily Atlas" and author of many magazine poems and special articles. Mrs. Locke was friendly with most of the literary workers of what is now called the "golden age of American literature"—Whittier, Bryant, Poe, N. P. Willis, Mrs. Sigourney. Mrs. Osgood and many others. When Poe came to Lowell in 1848 to deliver his lecture on "Poetic Principle," he was entertained at Mrs. Locke's home and was introduced to many of her friends. The poet Whittier's residence in Lowell was brief. It resulted in a little book of impressionistic word pictures.

When American Drama Was at Its Best—During the great age of the American drama; that is between about 1840 and the advent of vaudeville in the eighties, Lowell had certainly better theatrical entertainments than are now vouchsafed it by the New York managers.

Boston was then far more important, relatively, in the theatrical world than it is to-day, and as the nearest large town to the Hub, Lowell was often favored with the presence of the greatest contemporary actors and actresses.

Much of the old-time prejudices against theatres survived, and entertainments were sometimes perforce given under disguises that were as transparent as is the name of "sacred concerts" more lately applied to Sunday evening variety shows. Both amateur and professional drama, nevertheless, was familiar to such of the Lowell public as liked to see plays.

A particularly instructive chapter of Lowell history is concerned with the attempts to maintain here a stock company generally similar in quality to the celebrated Boston Museum Stock Company. The plan started in 1840, when David Kimball, of Boston, brought to a room in Wyman's Exchange a collection of curiosities from Greenwood's old New England Museum. In Lowell, as at the New England capital, the "educational value" of the "curios" exhibited was relied upon to overcome the antipathy of many people toward the dramatic entertainment to which the admission fee also entitled the ticket holder. The curiosities in this "museum" consisted of objects of natural history, oil paintings, engravings, wax figures and other works of art. It cost twelve and a half cents to enter. Minors were not admitted unattended.

The Kimballs did not long continue their interest in this venture, and in 1845 they sold the entire collection and fixtures to Noah F. Gates for \$5,000.

This gentleman at once removed the curios, improved the theatrical accessories, obtained a license and engaged six or seven profes-

sional people among whom were George Wyatt, Mary Gannon and Master Meyer. Adelaide Phillipps, opera singer, and Freeman, the giant, were secured as special attractions. Under such auspices the house at once began to draw sizable audiences.

Then, in 1846, Mr. Gates aroused, as Cowley puts it, "strong indignation in Zion," by leasing for his theatre the building formerly owned by the First Freewill Baptist Society, on the site of the present Hildreth building at Merrimack Square. Despite initial opposition the place was fitted up as a museum and theatre and was opened on November 24, 1846, with a company from the Boston Museum, which included Mr. and Mrs. G. C. Germon, George E. Locke, Messrs. Davis, Currier and Rogers, F. W. Germon, Mr. and Mrs. Altemus, Mr. and Mrs. Bryant, Mrs. C. Groves, Mrs. Perkins, Miss Downs, Messrs. J. Brooks Bradley, Robinson, W. F. Johnson and Warner. The opening piece, appropriately, was "Raising the Wind."

The whirlwind followed. The anti-theatre forces put pressure on the city government and the manager was forbidden to give any more exhibitions, the license for 1847 being revoked. As a parting performance on the last day of 1846 Mr. Gates had a stellar attraction in the person of Tom Thumb in a play called "Much and Little."

Friends of the American drama, however, were not wanting in Lowell, and in the first four days of 1847 they circulated a petition, urging that Mr. Gates' license be restored. This secured upwards of 2,200 names. The city council yielded to the point of holding a hearing. The petitioners engaged Hon. Thomas Hopkinson, one of the most distinguished lawyers of the city. The case against the drama was presented by two clergymen, Messrs. Thurston and True, who based their argument solely "on Bible grounds." Many of the council were "professors," but the petitioners won a qualified victory. A license was granted on condition that the house close at ten-thirty and "that moral plays only should be produced."

Thenceforward, despite recurrent fires that every now and then threatened to bankrupt the management, Lowell for a number of years saw some of the best actors of the time who would come down from Boston for a week's engagement, playing to the support of the stock company. The enterprise in 1850 was regularly incorporated with a capital of \$60,000, and with the following officers: President, Noah F. Gates; clerk, W. A. Richardson; treasurer, G. L. Pollard; directors, the foregoing and B. H. Weaver, F. A. Hildreth, A. B. French and Henry Reed. The prices were increased to fifty cents for the box seats and reserved seats. On May 10, 1850, was presented "William Tell," with Joseph Proctor in the title role. The week following came Mr. and Mrs. McFarland and Mrs. Nichols in the "Wife and Claudare." A notable week in September, 1850, was given by Junius

Brutus Booth, then sixty years old, presenting Richard II. and other Shakespearean pieces. In November of that week Mr. and Mrs. J. W. Wallack gave several classic plays, and Mr. and Mrs. Dibdin Pitt appeared in Charles XII. and Hamlet. George E. Locke, J. B. Booth and Charlotte Cushman succeeded one another as popular visitors.

In 1851 the director manager discharged his old company and engaged a new one, having as its principal members: Mr. and Mrs. W. L. Ayling, Mr. and Mrs. H. M. Herbert, Mr. and Mrs. M. A. Tyrrel, Messrs. Steele, Lubey, Joyce, Howe, Mrs. Groves Rainforth, Misses Steele and Parker. Professor Herman Eckhardt was signed as leader of the orchestra.

There may have been local feeling regarding the discharge of the former company. It is recorded, at all events, that the new organization "never were the favorites, nor did they do the business of the original one." The house was regularly open, however, until September 30, 1853, when a fire of unknown origin gutted the place.

Nothing daunted, the owners rebuilt the theatre at an expense of nearly \$5,000 and reopened on January 2, 1854, with W. L. Ayling as manager and with a company comprising Mrs. Ayling, Mrs. Forbes, Mrs. Bryant, Messrs. Kames, Linden, Madigan, Kavanaugh, Benson and others. Such pieces were presented as "London Assurance," "Raising the Wind," "Uncle Tom's Cabin," "The Loan of a Lover," "The Lady of Lyons," "The Spectre Bridegroom" and various Shakespearean dramas. Mr. Gates personally resumed the management in October, 1854. In that season several famous visitors played at the house. A drama entitled "The Five Masks," written by a local amateur, was staged successfully. The stock company's season closed the latter part of April, but several traveling shows rented the house during the summer season. In November, 1855, the house reopened under a new management which Mr. Gates soon displaced. In the second week of December, Mr. Wallack brought Shakespearian roles. Then came Mrs. Vincent in "The Merchant of Venice." She was followed by the National Theatre Company of Boston, who were playing, when on January 30, 1856, another fire broke out and completely destroyed the playhouse. It was not rebuilt and thus passed Lowell's most famous and artistically meritorious stock company. During its prosperous period, so Cowley states, it employed an average of thirty people at salaries aggregating about \$300 a week, which certainly would not figure out at a high average.

Amateur theatrical organizations were fairly active in Lowell prior to the Civil War.

In 1836 some thirty young men of the city formed a Thespian Club to give gratuitous entertainments in the former Lowell street theatre, for which a license had been refused to professionals by the

selectmen of the town of Lowell. This association contained at least one member who later became a distinguished stage person, J. Brooks Bradley. Other locally prominent performers in its exhibition were Perez Fuller, John Wellington, John Sweetzer, Moses Winn, William T. G. Pierce, Luther Conner, Joseph Ripley, Kelsey Moore, Miss Willis, Miss Seymour, Miss Eaton. Perhaps the first play to be written in Lowell was staged by the Thespians, one based on the story of Henry VI. and written by Mr. Clapp, one of the high school teachers. The performances of the association soon created a debt, and as a means of liquidating this an admission fee of twenty-five cents was charged. When presently the members found themselves out of debt, they were so pleased that they decided to disband.

The example of the stock company a little later presumably stirred up new interest among Lowell amateurs, for in the late forties and fifties numerous dramatic performances, pantomimes, dioramas and other forms of entertainment were offered at City Hall, Merrimack Hall, Concert Hall, Classic Hall, Wentworth Hall, Welles Hall, Empire Hall, Huntington Hall, Jackson Hall, Central Hall and Mechanics' Hall. Advertised by handbills and not usually reported in the newspapers of the period, the records of these performances are quite meagre. One of the few that got considerable publicity was the performance given December 14, 1853, by the Aurora Club, which had engaged a hall in a building at Merrimack and Prescott streets. About two hundred people were in attendance. Just as the play began the whole floor gave way, dropping to the story below, fortunately without a panic which might have caused the loss of lives.

Most of the plays written in Lowell during the first decades—and for that matter during subsequent years—have gone into deserved oblivion.

One very famous, if not highly meritorious piece which was dramatized in Lowell, is "Ten Nights in a Bar-room," made over from T. S. Arthur's novel of that name by William W. Pratt. It had its premiere in the nearby city of Lawrence.

Mid-Century Musical Offerings—Much of the best music in Lowell three-quarters of a century ago, as well as subsequently, has been given in connection with church services. Amateur help was commonly offered, for the day of high-priced organists and singers did not arrive until after the Rebellion.

In Atkinson Varnum's reminiscences of the oldest church within the present city limits, the West Dracut church at Pawtucketville, reference is made to an orchestra which was quite famous before the society in 1850 purchased a modern organ. Among the instrumentalists were Zadoc Lew, of the family of colored people from Groton, who have already been mentioned in connection with their musical serv-

ices in the Revolutionary army, this particular Mr. Lew being "quite a celebrated player, for his day, on a bassoon and other wind instruments;" Nathaniel Varnum, Jeremiah Varnum, Orford R. Blood, John T. Spofford, and Gordon F. Tucker (players upon the bass viol); Oliver P. Varnum, Rufus Freeman, John Cutter, Joseph Merrill, Rapha W. Sawyer, A. C. Varnum, violinists; Adrastus Lew, clarionet; Cof-fern Nutting, trombone. The society also had a choir led for many years by Henry Osgood, a powerful bass singer, whose services were so approved that he was paid a small salary by a member of the congregation.

Art and the Exposition of '51—The instincts that demand art are never entirely repressed and they were no more sadly perverted in Lowell of the early Victorian decades than elsewhere in North America—possibly, indeed, in some respects they were rather less absurdly manifested than in most communities.

It is amusing, nevertheless, to review the artistic features of such an attempted exposition of the beautiful and picturesque as was brought together in one section of the great Mechanics' Fair of the autumn of 1851.

That was the year of the first of the large international expositions in London which to the few who were truly critical revealed strikingly the downward tendency of the arts, but which was hailed by the unthinking as a wonderful exhibition of the superior taste of modern times.

The fame of the London show undoubtedly led to efforts to make an exceptionally striking exposition of art and manufactures at Lowell. The collections in the "Cotton Palace," or "Pitchpine Palace" as it was humorously called, were possibly of about the same grade of artistic achievement as those in the celebrated Crystal Palace in England. The entries, as one to-day follows an account that was published serially in the "Daily Vox" of September and October, 1851, are often of a sort to raise an indulgent smile.

The vestibule, which was intended to be thoroughly impressive, contained several of the portraits with which the present generation is familiar: The good honest, workmanlike likenesses of John Lowell, Abbott Lawrence, Nathan Appleton and other fathers of the town. They, at least, were dignified and imposing. Here, too, was a great plain block of marble, to be sent by the ladies of Lowell for incorporation in the Washington monument, and suitably inscribed with lines written by Mrs. Elisha Huntington:

From the Ladies of Lowell, Massachusetts:
Where Industry her grateful tribute pays,
To Him whose valor won us prosperous days.

"Over the above," commented the "Vox" chronicler, "sits a neat case of patented Tooth Powder, looking very nice, by Dr. L. C. Dale, of Boston. As there is no special description of its excellences, as the Doctor does not advertise in the "Daily Vox," we pass this by without further remark."

The section of the exposition given over to objects of art, antiquity and curious interest, as opposed to the machinery and manufactured goods in the textile section, must have presented an astonishing medley of the genuinely artistic handicrafts of the colonial period, the debased contemporary "fancy-work" and exhibits of purely commercial character. In juxtaposition, in the "Vox's" story, one finds such items as these:

996—A most formidable looking body of defective masticators extracted by Dr. S. Lawrence, Lowell. One can almost hear a thousand agonized groans, issuing from these relics of wretchedness.

409—A very large Picture of Washington, wrought in worsted by Miss Laura N. Andrews, Lowell. It is an admirable piece of work, and attracts much attention and deserved praise.

Here is a continuation of the running narrative and critical exposition:

Say 868, a love bouquet of wax flowers—enough—sight more natural than real flowers—by Miss L. Haynes. The accomplished and judgmatical reporter of the *Courier* says it is the best specimen of wax work in the fair. We dare not be so bold—but it is really lovely.

To close this case, we take No. 723. Four admirably executed cameos, all likeness from life, by Miss Marguerite Foley, Lowell—certainly a most artistic proof of that young lady's talent and skill, in this delicate and difficult branch of sculpture. These specimens, as far as we are able to criticise, will bear comparison with any work of this kind we ever saw. They are really first rate.

The cameos contributed by Miss Foley, it is safe to assume, were among the most really meritorious works of art in the exhibition, for the later career of this young woman was quite distinguished.

Two more examples of the art criticism of 1851 will suffice; the latter entry, introducing one of the earlier and ambitious productions of the late Jonathan Bowers, whose round stone house on Wannalancet Hill was, and is, one of the architectural freaks of the Commonwealth:

274—Another excellent crayon drawing by Miss Emeline Colcord, Lowell. Emeline should continue her practice.

790—This, probably, is the most ingenus [sic] specimen of cunning and patient labor upon a mere fancy article, in the whole Fair. It is a Mosaic Centre Table—at least, that is the imperfect description

in the Catalogue; for it is of Mosaic (of wood) glass, shell, gilt, pearl, and we can hardly say what else. The maker, Mr. Jonathan Bowers, of this city, is said to have received no regular mechanical education—but the work shows that he has a thorough knowledge of every branch, requisite to produce this rare and costly table, in the perfection of mechanic art. It is said that \$1,000—the News says \$2,000—have been refused for this beautiful piece of work; but we do not know what credit belongs to the stories. The thousand dollars is a large sum of money, for so small an article of furniture—more, even, than we could, ourself, flush as we are, afford to pay.


Specific examples like the above of the sort of taste prevailing in mid-century Lowell are perhaps worth citing, if only to prevent sentimentalizing this era of national and local history, as some antiquarians are already bidding us do.

Art of a certain sort was publicly exhibited during several years in the old Lowell Museum, the annals of which have already been given in part. As in the case of the Boston Museum, the collections of art and curiosities were of the nature of a blind, to help overcome the aversion which many of the public then had for theatrical performances. The exhibits were of a sort to make a really esthetic soul shudder, if one may judge from such advertisements as the subjoined, which appeared in the "Vox Populi" of March 26, 1842:

(LOWELL MUSEUM)


Corner of Merrimack and Central Streets

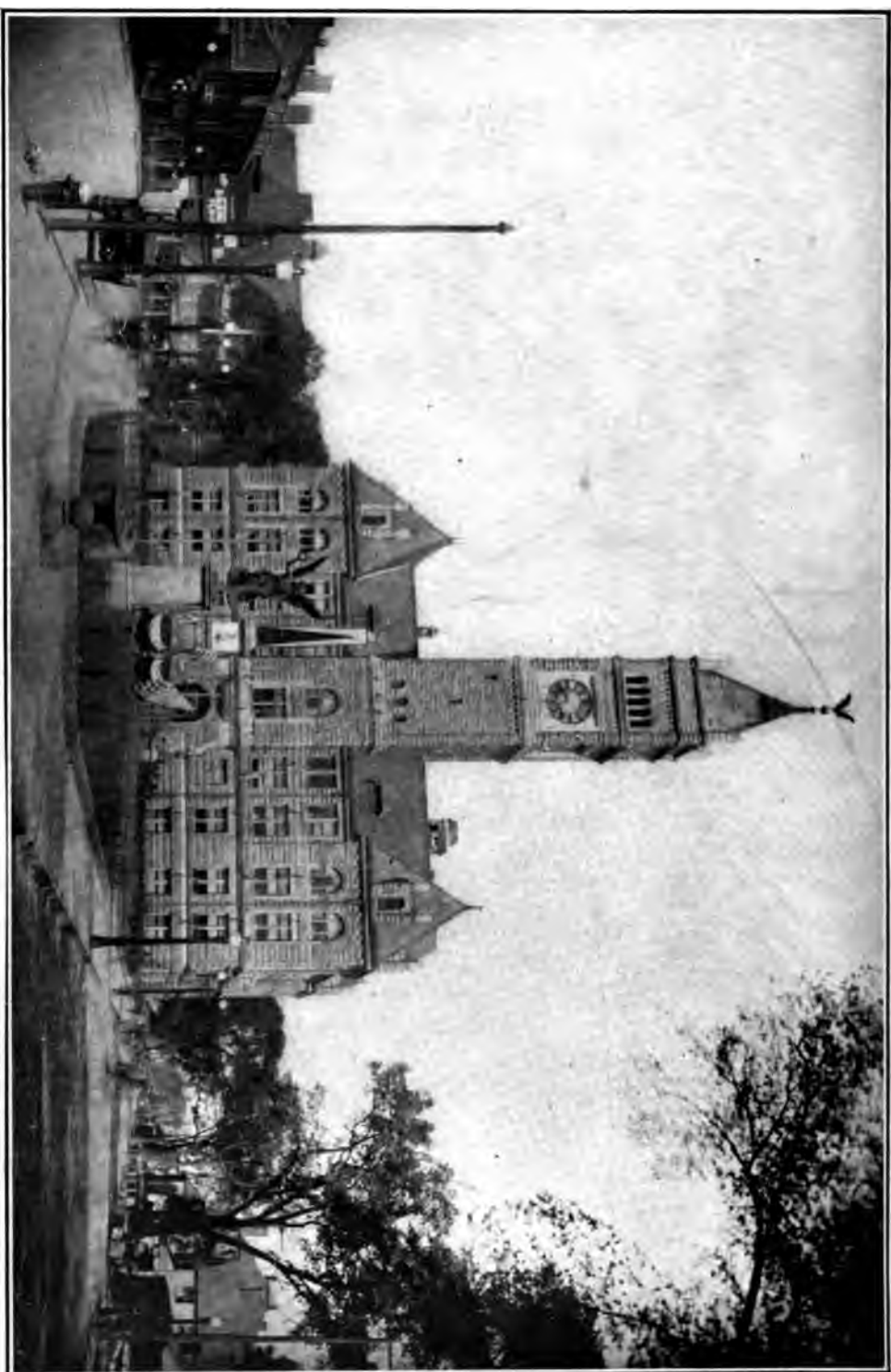
The public are respectfully informed that the above Institution, having received many valuable additions and having been entirely refurnished and renovated throughout, is now open day and evening for the reception of visitors. The collection, which embraces a large variety of specimens of Natural History, Painting, Engraving, Statuary, Wax-work and Curiosities, is perfectly in order and so arranged as to impart much instruction and amusement. Among the objects of real interest are fourteen large Scriptural paintings of the Life and Sufferings of our Saviour, the Musical Androides, Hall of Industry, Military Androides, Elephant Horatio, Ourang-Outang, double Lamb, etc., etc.

 Just added, the great picture of the Death of Abel, which has always been considered an exhibition alone. Surmounting the building is an Observatory which commands an extensive view of the city.

Ladies and Families are informed that the strictest order is maintained and that they can with perfect propriety visit the Museum without the company of a gentleman.

F. GATES, Superintendent.

 Boys are not admitted unless accompanied by their parents or guardians.



CITY HALL, AND MONTICENT SQUARE.
Showing Monument Marking Burial Place of the First Three Men Killed in the Civil War.

CHAPTER X.

Lowell in the Civil War.

The alertness of Lowell throughout the crisis that was precipitated when several of the slave-holding States undertook to leave the Union, was typical of a community in which young and vigorous people still predominated. At no other period of its history has the city so consistently taken National prominence as during the years 1861-65. Lowell was first in several episodes of the war and lagged in nothing that was required for successful prosecution of the conflict.

So far as the struggle was caused by the slavery question, Lowell, it must be conceded, was, up to the outset of the war, far from being a community united in opposition to the pretensions of the Southern autocracy. Except, indeed, for a few people who were regarded as cranks, the whole North, as Wendell Phillips once put it, "was choked with cotton dust," and a manufacturing city, in especial, whose prosperity was bound up in a plentiful supply of raw cotton, and whose leading business men had close relations with the South, was unlikely to be a hotbed of anti-slavery agitation. The laboring classes as well as the employers were often hostile to the efforts of abolitionists, feeling that, as Oneal says, "division along sectional lines delayed the coming of the solidarity of all workers North and South." So that, although the pre-Lowell district, as we have seen, had in Squire John Varnum and General Joseph Bradley Varnum two of the earliest American protagonists of complete human freedom, the city of 1860 was by no means a unit in resisting the encroachments of feudal slavery upon the freer institutions of the North.

The "big business" of the day, it may be added, was generally averse to interfering with the South's "peculiar institution." In the cotton industry dividends were quite dependent upon a regular supply of the basic material of the manufacture. It is a safe conjecture that many of the mill men whose properties were at Lowell would have echoed the sentiments of Nathan Appleton, one of the city's founders, as expressed in an apologetic letter of December 15, 1860, to a Charleston man with whom he had business dealings. "It is evident," wrote Mr. Appleton, "that the South is in a state of great excitement, a feeling of extreme indignation toward the North, which has been produced in great measure by the abuse of the South poured forth in speeches and letters by the more extreme of our politicians. But it is a great mistake to suppose that these represent the feelings of the masses in the North or even in New England. Every man of common sense knows that the abolition of slavery, if desirable, is an utter impossibility, and there is no such thing as a general hatred of the South "

While the Boston manufacturers no doubt expected that the National trouble would blow over, they shrewdly undertook to prepare against it as far as was possible in the weeks between President Lincoln's election and his inauguration. It was reported on January 18 that the manufacturing companies were buying largely of raw cotton and storing it for future use. "One corporation has lately made, in the purchase of a cargo of this article, enough to pay its last semi-annual dividend. The different railroad tracks to the various corporations in the city are daily covered with cars loaded with cotton." This foresight was responsible for some of the mills continuing to operate at or near capacity for many weeks after the war had reduced shipments to practically nothing. That business was good at the beginning of 1861 was attested by "Milo," the "Boston Journal's" correspondent, who told his readers that "notwithstanding Southern politicians and newspapers are proclaiming that the working classes of the north are on the brink of starvation, business is as good in this city as it usually is at this season."

Conditions in Lowell at Outbreak of the War—About to complete its fourth decade as a factory city, Lowell had no reason to desire anything but the preservation of peace. The census of 1860 showed that the city had reached a population of 36,827, and an assessed valuation of \$20,894,207. The effects of the panic of 1857 had passed and times were reasonably good. Normally the development of the city should have gone forward during the next half decade without unusual excitement or serious industrial depressions.

Municipal politics continued on a high plane. City officers for the year 1861 were elected toward the close of 1860 as follows: Mayor, Benjamin C. Sargent; aldermen, Samuel T. Manahan, Jonathan P. Folsom, James Watson, William I. Morse, Hocum Hosford, Aldis L. Waite, Sager Ashworth, William S. Gardner.

The new mayor was one of the business men of good grade who frequently stood for office in ante-bellum Lowell. He was a bookseller by trade, whose place of business in one of the rented stores of City Hall is pleasurably remembered by older Lowell people of studious tastes. A native of Unity, New Hampshire, he had come to Lowell in 1839, at the age of sixteen, to serve as clerk in the bookstore of his brother-in-law, Abijah Watson. In 1843 he went to New York, where for three years he was employed in a book and publishing concern. Returning to Lowell he started a business of his own in Central street, which was later removed to the City Building. He was a member of the common council for five years in the fifties, during three of which years he was its president. As mayor he was a quiet, efficient official, who did what was expected of him in times of crisis and emergency. He died March 2, 1870.

Political conditions were otherwise favorable in Lowell, as well as other Massachusetts communities. The State election of 1860 had provided an unusually able and energetic government. John A. Andrew, destined to be known as the War Governor, was then chosen for the first time. In the Legislature, which met on January 2, 1861, William Claflin, of Newton, was president of the Senate; John A. Goodwin, of Lowell, Speaker of the House of Representatives.

Abolition of the Toll Bridge—A local happening of the winter that preceded the war, vied in excitement with the National situation. Residents of Pawtucketville, the West Dracut and of the Pawtucket street section of the city, late in 1860, made a final and successful effort toward abolition of the toll nuisance on Pawtucket bridge.

At a meeting in Cambridge of the Middlesex county commissioners on January 1, 1861, a petition of Peter Sullivan Coburn and others to lay out Pawtucket bridge as a public highway was considered. Simultaneously a petition was prepared and submitted to the Legislature urging a special act to enable the city of Lowell and the town of Dracut to support the bridge jointly and justly between them. These petitions were duly granted.

The joint jubilation of Lowell and Dracut on the occasion of the abolition of tolls on the Pawtucket bridge occurred, fortunately, just before the National crisis had become so acute as to absorb the attention of serious-minded people. Through some one's initiative a public meeting in Huntington Hall was called for February 9 to consider whether it would be desirable to have a celebration in honor of the liberation of the bridge.

It was the unanimous sense of the assembly that such celebration would be desirable, and a committee of Lowell citizens was chosen as follows: Alfred Gilman, E. B. Patch, Levi Sprague, James Watson, W. G. Wise, William McFarlin, H. M. Hooke, G. F. Sawtell, J. U. Gage. Dracut was to be represented by Asa Clement, J. B. V. Coburn, Joseph Chase, C. B. Varnum and George W. Coburn; Pelham by E. M. Marsh, and Tyngsborough by Cyrus Butterfield. It was arranged that the ceremonies at the bridge should take place on February 20 following, and that there should be exercises in Huntington Hall on Washington's birthday.

Accordingly, on the 20th of February, in a driving snowstorm, a crowd gathered around the mayor of Lowell and others of the city government, the selectmen of Dracut and other dignitaries, while the treasurer of the city and town respectively paid over four thousand and two thousand dollars to the county treasurer, who added a check for six thousand dollars and presented the whole amount to Artemas Holden, treasurer of the bridge company.

The papers were signed at ten forty-five, whereupon County Com

missioner Huntress declared the bridge a free public highway. Three cheers were given, the nearby church bell was pealed and thirty-four salutes were fired from a nine-pound gun, which had been brought to the river bank. Then the toll gate was hitched behind a sleigh in which rode William McFarlin and Peter Sullivan Coburn, who had been the prime movers in the agitation to free the bridge, and who were thus the first to have the right to cross it without paying toll. Behind them came members of the celebrated Lew family, playing Yankee Doodle on sundry instruments. Thus ended the services of Toll Collector Proctor, who had held up "teams" and foot passengers for twenty-nine years. Mr. Holden, during nearly as many years, had been watchdog of the corporation's finances. The bridge had been privately owned and managed since 1792.

The celebration on the 22nd in Huntington Hall brought to Lowell a big gathering of sleighs from Dracut, Tyngsborough and the southern towns of New Hampshire. There was music by the Otto Club and the Hall Brass Band, singing by Perez Fuller, and addresses by notables. The sole disappointment was that a poem which had been widely heralded as forthcoming from a former resident now in the West failed to reach the committee in time to be read.

With the opening of Pawtucket bridge as a highway, Lowell citizens had free access to thirty-one bridges in addition to those of the manufacturing corporations. Of these bridges the city owned fourteen, the Locks and Canals Company thirteen and the railroad companies four.

In the midst of the city's peaceful life, which was but little ruffled by the exciting election of November, 1860, it began to be evident by the first of the new year that momentous events were on their way. Preparations against a great emergency that was visibly approaching were not wanting in Lowell. Officers of the Sixth Massachusetts Regiment, several of whose companies were composed of Lowell men, met on January 21 at the American House to "arrange for future contingencies." Through Major B. F. Watson a resolution was presented and unanimously adopted, as follows: "Resolved, That Colonel Jones be authorized and requested, forthwith, to tender the services of the 6th regiment to the commander-in-chief and legislature, when such service may become desirable, for the purposes contemplated in General Order No. 4." This resolution was read shortly afterwards in the State Senate by General Benjamin F. Butler. It was also sent to Governor Andrew and by him mentioned in the following message of January 22 to the Legislature: "I transmit herewith, for the information of the General Court, a communication offering to the Commander-in-Chief and the Legislature the services of the Sixth Regiment, Third Brigade, Second Division of the Volunteer Militia of the Common-

wealth, which was this day received by me from the hands of Brigadier General Butler."

This message from the Lowell meeting was duly noticed by the Legislature, which, on January 23, passed the following resolve:

Whereas, several States of the Union have through the action of their people and authorities assumed the attitude of rebellion against the National Government; and whereas, treason is still more extensively diffused; and whereas, the State of South Carolina, having first seized the Post Office, Custom House, moneys, arms, munitions of war and fortifications of the United States, has by firing upon a vessel in the service of the United States, committed an act of war; and whereas, the forts and property of the United States in Georgia, Alabama, Louisiana and Florida have been seized with hostile and treasonable intention; and whereas, Senators and Representatives in Congress avow and sanction these acts of rebellion, therefore,

Resolved, that the Legislature of Massachusetts, now, as always, convinced of the inestimable value of the Union, and the necessity of preserving its blessings to ourselves and our posterity regard with unmingled satisfaction the determination evinced in the recent firm and patriotic special message of the President of the United States to apply and faithfully discharge his constitutional duty of enforcing the laws and preserving the integrity of the Union, and we proffer him, through the Governor of the Commonwealth, such aid in men and money as he may require, to maintain the authority of the National Government.

Resolved, that the Union-loving and patriotic authorities, representatives, and citizens of these United States whose loyalty is endangered or assailed by internal or external treason, who labor in behalf of the Federal Union with unflinching courage and patriotic devotion, will receive the enduring gratitude of the American people.

Resolved, that the Governor be requested to forward, forthwith, copies of the foregoing resolution to the President of the United States and the Governors of the several States.

Certain defects in preparation among the Lowell companies were suggested in a letter which their colonel addressed to Governor Andrew early in February. His communication follows:

Boston, Feb. 5, 1861.

To His Excellency, the Commander-in-Chief:

At our interview this morning, you requested me to put the matter which I wished to communicate in writing. In accordance therewith, I make the following statement as to the condition of my command, and take the liberty to forward the same directly to you, passing over the usual channel of communication for want of time.

The Sixth Regiment consists of eight companies, located as follows, viz.: four in Lowell, two in Lawrence, one in Acton and one in Boston, made up mostly of men of families, "who earn their bread by the sweat of their brow," men who are willing to leave their homes, families, and all that man holds dear, and sacrifice their present and future as a matter of duty

Four companies of the regiment are insufficiently armed (as to quantity) with a serviceable rifle musket; the other four with the old musket, which is not a safe or serviceable arm, and requiring a different cartridge from the first, which would make confusion in the distribution of ammunition.

Two companies are without uniforms, having worn them out and were proposing to have new ones the ensuing Spring. Six companies and the band have company uniforms of different colors and styles, but insufficient in numbers, and which are entirely unfit for actual service, from the fact that they are made of fine cloth, more for show and the attractive appearance of the company on parade than for any other purpose, being cut tight to the form and in fashionable style.

I would (after being properly armed and equipped) suggest our actual necessary wants, viz.: a cap, frock coat, pantaloons, boots, overcoat, knapsack, and blanket to each man, of heavy serviceable material, cut sufficiently loose and made strongly, to stand the necessities of the service. Such is our position, and I think it is a fair representation of the condition of most of the troops in the State. Their health and efficiency depend greatly upon their comfort.

My command is not able pecuniarily to put themselves in the necessary condition, nor should they, as matter of right and justice, be asked so to do, even were they able. What is the cost in money to the State of Massachusetts, when compared to the sacrifices we are called upon to make?

Respectfully,

EDWARD F. JONES,
Colonel Sixth Regiment.

P. S.—I would also suggest that it would require from ten to fourteen days as the shortest possible time within which my command could be put in marching order.

The watchfulness with which the officers of the Sixth Regiment looked after details of equipment undoubtedly explains in large part the priority of this Bay State regiment in taking the field. These men were descendants in spirit as well as lineage of the minute-men of Lexington Green.

General Butler's "First Aid" to the Union—The very real contributions which the militant attorney of Lowell made to the efficient conduct of the war in its initial stages have perhaps not been exaggerated in the accounts given by himself and others in the Butler correspondence that was published for the first time in 1917.

General Butler's early and effective pleading for preparation in the Bay State was noted in the address which General Edward F. Jones, commander of the Massachusetts Sixth Regiment, made before the Loyal Legion in New York, May 13, 1911. A report of this address states that "on 14 Jan., 1861, General Butler, who was in command of the Third Brigade, Mass. Vol. Militia, called upon Col. Jones, commanding the Sixth Regiment (himself) and requested that he (Jones) go with him (Butler) to see Gov. Andrew, remarking: 'Andrew and I are not very good friends, and you have more influence

with him than I have. I want to impress upon him (Andrew) the necessity of having some troops ready to meet the emergency which I know is coming. The South is attempting secession, and if the North is not ready, they (the South) will get an advantage which it will be difficult for us to overcome.'"

General Butler himself committed to writing his memory of the occurrences of this winter in a letter to General William Schouler under date of July 10, 1870. Schouler, it should be noted, as editor of the Bay State's war records, had been in position to enhance or depreciate reputations. It might also be noted that he was a former Lowell editor of the "Courier" at a time when that sedate paper was much under fire of the "Vox Populi," to which Butler was a frequent anonymous and markedly sarcastic contributor. The 1870 letter from Washington to this old political adversary was quite conciliatory in tone. The significant portion of it begins as follows:

That you had espoused the cause of your chief, Governor Andrew, in the unfortunate differences of opinion which arose about the recruitment of the New England Division in 1861 I have never thought ground of personal enmity. I expected that fidelity to your commander; and therefore when in 1864 you came to my headquarters you will remember that you had no cause of complaint at your reception. I had seen, however, subsequently, indications in your writing up the part that Massachusetts took in the war, of what seemed to me a desire to belittle any efforts of mine in behalf of the country in the great struggle; but I have never placed pen to paper to correct any supposed misrepresentation or omissions upon your part which fell to my lot.

Undertaking for Schouler's information a narrative of his personal interest in the contest that in the winter of 1860-61 was seen to impend, General Butler told how on December 23, 1860, he was in attendance at the Democratic convention in Washington which had been planned for at Baltimore in the preceding spring, had been planned for in the event of the party's defeat at the national election:

I found that all hope or desire to reorganize the Democratic party as a union party had passed away, especially from the more advanced of the southern men. They looked for an immediate dissolution of the Union, with homogeneous government constructed in the South, with slavery for its corner-stone, with which piecemeal portions of the North should seek admission. I remember Pennsylvania was to be admitted first, as she was deemed likely to ask; then the North-western states, particularly Illinois, were to be tolled into the fold, that state being desirable because she was the home of the President. No doubt was expressed that Indiana would be among the earliest to take part with the South; that New York City, if she could not carry the state with her, would be supported in dividing herself as a free

city from the rest of the state. When I asked a southern gentleman what was to be done with New England, he said that she was to be left out in the cold, except perhaps Connecticut, which might well enough be a part of the state of which New York City was to be the centre.

I said the North would fight.

He said the North could not fight. Who in the North would fight? I said I would, for one. He replied there will be men enough found at the North to take care at home of all who want to fight the South. I retorted that if we marched South we should leave all the traitors behind us hanging on trees.

After this conference Butler returned to Boston, where he arrived on January 3, convinced in his own mind that there would be war. He immediately saw Governor Andrew and explained the need of having the militia ready for possible service at inauguration time. At his suggestion Andrew made a recommendation that the legislature appropriate \$25,000 for overcoats. This measure was attacked as extravagant by newspapers of both political parties. "The reply was," Butler writes sarcastically, "on the part of the Democratic papers,—with that charity as to motive which ever distinguishes the partisan press,—that General Butler might have advised the Governor to get the overcoats, but as he was a large stockholder in the Middlesex Mills which made such cloth it was having an eye to business in getting the contract for them to his mill."

Events of February and March, 1861, are referred to passingly in Butler's letter. On the evening of April 16 came the order for the Massachusetts troops to entrain for the defence of Washington. "I went home to Lowell that night from Boston," he writes, "and saw there James G. Carney, Esq., president of the Bank of Mutual Redemption, and my lifelong friend, now deceased, patriotic gentleman of far-reaching influence, and said to him: 'You can do me a favor. The Governor of the State has orders to march troops to Washington, and he has no money with which to do it. You can do an act of patriotism and an act of friendship to me at the same time by offering to the Governor a credit of fifty thousand dollars at your bank until the legislature can get an appropriation'."

Mr. Carney readily assented. With this offer in hand General Butler went to the Governor and asked to be detailed as brigadier-general in command. The chief executive asked about ways and means. "Governor," replied General Butler, "I have foreseen and provided for it. Here is an order for a credit of fifty thousand dollars on the Bank of Mutual Redemption, and I doubt not every bank in State street will follow the example. Now I very much desire to be detailed to march with these troops. Two regiments of my brigade are going and they cannot go without their brigadier." He "took the

matter under consideration for a short time; the Major-General of Militia, General William Sutton, was soon after present and strongly urged the same thing, and so did General Oliver, and the Governor detailed me in command of the troop. The rest is history."

Lowell observers, meantime, had seen that nothing helpful came out of the peace convention held at Washington in February, 1861. They read with keen interest President Lincoln's inaugural address of March 4, in which he laid down as basic principles that (1) the rights of each State to control its domestic institutions according to its own judgment exclusively should be maintained inviolate; (2) the fugitive slave clause of the constitution and the fugitive slave law should be executed; (3) the Union is unbroken and perpetual; (4) the laws of the Union should be faithfully executed in all the States. Mr. Lincoln's decision to send supplies to Fort Sumter, already in a state of siege, was highly approved. Finally, on April 12, came the order from Governor Pickens of South Carolina to bombard the fort. Amidst the flare-up of indignation caused by this open declaration of war Massachusetts at once took a prominent place in the movement to protect the seat of national government at Washington.

A spirited demonstration of loyalty was that given by citizens of Irish nativity or parentage on St. Patrick's Day, 1861. The Americanism of the men who fled from Ireland to escape economic oppression and seek larger industrial opportunities in this country is almost proverbial. In Lowell it was admirably displayed from the outset. The celebration of March 17 was under the auspices of the Lowell Irish Benevolent Society. Orators of the day were John A. Goodwin, who still felt that "secession will come back like the prodigal son after they have starved in isolation long enough," and General Butler, who announced that he was disposed to offer the olive branch of submission to the traitors with the sword as alternative in case they refused to accept the tender.

Among the patriotic "premieres" which may be claimed for Lowell is that the first flag to be unfurled from a church tower was in March, 1861, when the National emblem was floated from the spire of St. Paul's Methodist Church, upon recommendation of Rev. William R. Clark. Churches throughout New England soon followed this example.

In the middle days of April, the season when, traditionally, wars begin for the United States, Lowell witnessed the departure of the four companies of the faithful Sixth. The non-combatant citizen had read in the papers of the determination of the authorities at the State house to make an immediate demonstration against secession. On April 15, from Adjutant-General William Schouler, there came to Colonel Jones at Lowell the preëmpatory order "to muster your regi-

ment on Boston Common, forthwith, in compliance with a requisition made by the President of the United States."

A hurry call was rushed to more than thirty towns and villages in the neighborhood of Lowell, in which individual members of the regiment lived. On the morning of the 16th upwards of 700 officers and men had responded. They assembled in Huntington Hall in whose galleries and about whose doors a host of onlookers had collected. An eloquent farewell to the troops was read by the Rev. Amos Blanchard, of the Kirk Street Congregational Church.

Thence the men entrained in the railway station below the hall. On arrival in Boston they marched to Faneuil Hall, where they were addressed by Governor Andrew in a stirring appeal. The regimental colors were presented to the commanding officer with the words: "We shall follow you with our benediction and our prayers. Those whom you leave behind you we shall cherish in our heart of hearts." To this sentiment Colonel Jones replied: "You have given me this flag, which is the emblem of all that stands before you. It represents my whole command, and, so help me God, I will never disgrace it."

Thus departed for the disturbed borderland a regiment that had enrolled several hundred of the young men of Lowell and the vicinity who had in peace times submitted themselves to military discipline against such an emergency as this. It mustered in a total of 699 men. The companies and their captains were as follows: Company A, National Greys, Lowell, Captain Josiah A. Sawtelle; Company B, Groton, Captain Clark; Company C, Mechanics Phalanx, Lowell, Captain Albert Follansbee; Company D, City Guards, Lowell, Captain James W. Hart; Company E, Acton, Captain Tuttle; Company F, Lawrence, Captain Chadbourne; Company G, Worcester, Captain Pratt; Company H, Watson Light Guard, Lowell, Captain John F. Noyes; Company I, Lawrence, Captain Pickering; Company K, Boston, Captain Sampson; Company L, Stoneham, Captain Dike.

Lowell's Most Celebrated Soldier—The prompt response of the Sixth Regiment called National attention, amongst other things, to the energy and efficiency of the brigade commander, under whose orders this mustering in was effected, and whose further undertakings and exploits will necessarily receive much space in any account of Lowell in the Civil War.

The Lowell citizen whose fame was most notably enhanced by the Civil War, though in many respects it was already great before the conflict began, was Benjamin Franklin Butler, lawyer, politician, statesman, soldier. Reference has been made in preceding chapters to views and acts of this very remarkable man, practically all of whose life was spent in Lowell, a personage of keen, incisive intellect, more likely perhaps to be right in national questions than some of his

political adversaries would like to admit; a loyal friend and aggressive opponent, one who believed heartily in the city of his residence and who was generally believed in by his friends and neighbors.

General Butler was born at Deerfield, New Hampshire, November 5, 1818, a few months before his father's death. His grandfather, Zephaniah Butler, had come to the neighboring town of Nottingham from Connecticut. His father, Captain John Butler, had served with the dragoons in the War of 1812 and had subsequently commanded a Letter of Marque in the service of Simon Bolivar, the South American liberator. He died in the West Indies shortly after Benjamin's birth. The widowed mother, when the boy was ten years old, moved to Lowell, which city he saw for the first time from the crest of Christian Hill. His pride in the Lowell High School, of which he was one of the first pupils, has been attested in his reminiscences of its first graduates. He was consistently a believer in the public school system.

After finishing his preparatory course, young Butler entered Waterville College, Maine, from which he was graduated in 1838. He was at this time in somewhat delicate health, but a trip to the banks in a fishing smack built up his physique. He undertook the study of law in the office of William Smith, Lowell, and in 1841 he was admitted to the Middlesex county bar. He was meantime learning the ins and outs of the political game. In 1840 he made his first stump speech, in favor of Martin Van Buren. As he entered into the practice of his profession, he soon astonished older men than himself by his shrewdness and acumen.

Politically, Mr. Butler's sympathies were with the Democratic party from the outset of his career. At considerable risk of personal reputation, since his adversaries were often ready with charges of demagogism, he espoused the cause of the working class in the new industrial communities of which Lowell was a prototype. He was one of the advocates of a ten-hour law and as a member of the Legislature did much toward shortening the legal working day. He was a delegate to each National Democratic convention from 1844 to 1860. He first went to the Legislature in 1853. In the same year he sat at the constitutional convention. In 1859 he was one of three Democratic State Senators. In that year he drew up the bill by which the old Court of Common Pleas was abolished and the Superior Court was substituted. At the Democratic convention of 1860 he represented constituents who would have liked him to vote for Stephen A. Douglas for President. As, however, it was evident that a Northern candidate would not be accepted, General Butler voted for Jefferson Davis, afterwards President of the Confederacy. When the convention adjourned from Charleston to Baltimore, Mr. Butler and a few other Northern delegates, and a majority of those from the South, bolted

and nominated John C. Breckenridge. In 1859 Mr. Butler was the Democratic candidate, and in 1860 was the Breckenridge Democratic candidate for the Massachusetts Governorship, but was defeated on each occasion.

General Butler's natural ability and experience in military matters were more unusual than his detractors would sometimes concede. He joined the militia in 1839, as a private in the Lowell City Guard. He served in the ranks for three years. Thence he rose step by step through all the gradations of military rank, and at the outset of the Civil War he held the rank of brigadier-general. On April 15, 1861, he was pleading a case in a Boston court, when an order from the State house was placed in his hands. It stated that the Sixth Regiment should report for National duty on the morrow, the President having just issued his call for 75,000 volunteers. Hastily moving a postponement of the case (which remains postponed to this day), the lawyer soldier took the first train to Lowell to see that everything was in readiness for entraining.

The Lowell Martyrs in Baltimore—The 1861 anniversary of the battle of Lexington, as every schoolboy knows, witnessed the first bloodshed of the Civil War. Newspapers of the 20th brought to excited Lowell people fragmentary and somewhat inaccurate tidings of an attack made upon the Sixth Massachusetts by a mob in the streets of Baltimore. It was known that several men had been killed and others more or less severely wounded. An early report placed among the dead Private Edward Coburn, of Dracut. Facilities for collecting news and handling it over the wire were less well developed then than now. The "stories" carried in the Boston papers of the day after the occurrence seem almost surprisingly meagre and conflicting.

What actually happened was revealed to Lowell readers of the "Boston Journal" a day later, when this newspaper reprinted from the "New York Times" a corrected and summarized account which follows:

Through the courtesy of an eye-witness of the disturbance in Baltimore, upon occasion of the passage of the Massachusetts Volunteers, we are enabled to give a reliable account of what actually occurred, and at the same time to correct a false impression in regard to the number of troops engaged in conflict with the secession mob.

It appears that the Massachusetts Regiment occupied eleven cars and arrived safely and in excellent spirits at Baltimore. There was no demonstration made upon their arrival, and the cars were permitted to leave the depot with the troops still on board. The cars proceeded quickly through the streets of Baltimore on their way to the depot at the other side of the city, and the fears expressed by some of the citizens that an attack would be made were somewhat allayed. But they had not proceeded more than a couple of blocks before the crowd became so dense that the horses attached to each car were

scarcely able to push their way through. The remaining two cars of the train, containing about 100 men, were cut off from the main body and the men found themselves accompanied by an infuriated mob of over 8,000. These isolated cars were immediately attacked and several of the soldiers had their muskets snatched from them. At this moment news came that the Philadelphia Volunteers had arrived, and the report excited the mob to a fearful degree.

The Massachusetts troops, finding the cars untenable, alighted and formed a hollow square, advancing with fixed bayonets upon all sides in double quick time, all the while surrounded by the mob—now swelled to the number of at least 10,000—yelling and hooting. The military behaved admirably and still abstained from firing upon their assailants.

The mob now commenced throwing a perfect shower of missiles, occasionally varied by a random shot from a revolver or one of the muskets taken from the soldiers. The poor fellows suffered severely from the immense quantity of stones, oysters, brick-bats, paving stones, etc., the shots fired also wounding several. When two of the soldiers had been killed, and the wounded had been conveyed to the centre of the column, the troops at last, exasperated and maddened by the treatment that they had received, commenced returning the fire singly, killing several and wounding a large number of the rioters; but at no one time did a single platoon fire in a volley. Our informant is positive upon this point.

The volunteers, after a protracted and severe struggle, at last succeeded in reaching the depot, bearing with them in triumph their killed and wounded, and immediately embarked. The scene is described in glowing terms by our informant, who says that the calm courage and heroic bearing of the troops spoke volumes for the sons of Massachusetts who, though marching under a fire of the most embarrassing description and opposed to overwhelming odds, nevertheless succeeded in accomplishing their purpose and effected a passage through crowded streets a distance of over a mile—a feat not easily accomplished by a body of less than one hundred men when opposed to such terrific odds.

More directly personal accounts of the fray soon began to arrive in Lowell by mail and in the person of participants.

Captain Follansbee, of the Phalanx, who had command of the companies that were under attack, communicated from Washington a letter to the "Lowell Courier," which gives in simple, unaffected language a vivid picture of the happenings. His account of the detrainings of the troops is similar to that of other eye witnesses. When the assaults began the Bay State troops, he insisted, showed no signs whatsoever of panic:

The captains consulted together and decided that command should devolve upon me. I immediately took my position at the right, wheeled into column of sections and requested them to march in close order. Before we had started the mob was upon us, with a secession flag tied to a pole, and told us we could never march through that city.

They would kill every "white nigger" of us before we could reach the depot. I paid no attention to them, but after I had wheeled the battalion gave the order to march.

As soon as the order was given the brick-bats began to fly into our ranks from the mob. I called a policeman and requested him to lead the way to the other depot. He did so. After we had marched about a hundred yards we came to a bridge. The rebels had torn up most of the planks. We had to play "Scotch hop" to get over it. As soon as we had crossed the bridge they commenced to fire upon us from the streets and houses. We were loaded but not capped. I ordered the men to cap their rifles and protect themselves; and then we returned their fire and laid a good many of them away. I saw four fall on the sidewalk at one time. They followed us up and we fought our way to the depot—about one mile. Quite a number of the rascals were shot after we had entered the cars. We went very slow, for we expected the rails were torn up on the road.

Letters, vividly descriptive of the excitement in Maryland, were also published during the latter days of April from Lieutenant George E. Davis, of Company H; Private A. J. Herrick, of the National Greys, and Brent Johnson, of the Phalanx. One from R. A. Elliott, of the Phalanx, contained this paragraph regarding the conduct of his company: "About five or six of our men in this company were knocked down, but none were very seriously hurt. I got one stone on the back of my neck, but it did no damage. One man has his nose badly hurt. One got three bullets through his coat skirt, but was not hurt himself. So you see we had a hard time and not a man flinched a hair. We found forbearance of no further use and we fired. I saw three men killed in the discharge; each had rocks in their hands." Mr. Johnson's letter bore testimony, as other contemporary accounts did, to the intrepidity of the mayor of Baltimore, who did his best to quell the uprising of the turbulent citizens. He stated that the mayor met the troops about a mile from the railway station and that when the mob refused to desist, he took a rifle from one of the soldiers and shot a conspicuous rioter dead.

Return of the Bandmen from Baltimore—On the morning of the 22nd, several members of the regimental band returned to Lowell. They were met by a concourse of people at the station and escorted to their homes. These musicians took a natural pride in displaying their damaged instruments and especially the bass drum, with both heads broken. In passing through New York City, it was stated, the band was offered five hundred dollars for the drum, but was not tempted thereby. "They look tired and weary, and a few of them are slightly wounded by stones and brickbats," was a reporter's comment on their personal appearance.

From the Sixth's famous color-bearer, Timothy A. Crowley, Lowell readers were apprised of the occurrences through a letter, dated

at Washington on April 26, in which many of the incidents of the riot were retold. Of his own department the writer said: "The color was about two rods in the rear of the last company, and was never lowered an inch from the first raising in the streets among the rabble of Baltimore until I got into the cars for Washington. I took the position after one older, larger and more of a military turn than I had deserted and showed the white feather."

The incident, celebrated in the school histories, of the readiness with which the Bay State mechanics under General Butler repaired and rebuilt portions of a railroad and repaired a locomotive was also given in Color-Bearer Crowley's words. In reporting his conversation with men of the New York Seventh, he said: "They say that the general, when he found his mode of travel to this city [Washington] cut off by the demolition of the railway and the burning of the bridges, immediately ordered his men to commence work by laying rails, shoveling, building stone walls and in general putting things in order for transportation of the troops, the rails necessary for one line of tracks having been brought from the station above. The general, who is never behind time, dropped his coat and labored with the rest, while skirmishers, scouts, etc., were stationed for two or three miles in advance and thus by his energetic endeavors, the Seventh Regiment were enabled to reach here. No locomotive being run, the general ordered the men to break open an engine house and take a locomotive therein, which being done was found to be out of repair, and it was thoroughly overhauled, repaired and set in motion."

The arrival on April 23 of Daniel B. Stevens, of Lowell, from Baltimore, was noted in the Boston newspapers. He had been reported killed. Instead he had been hit in the side by a paving stone which broke three ribs and rendered him unconscious. He was taken up for dead and carried to the station house, where he lay unconscious for two hours. When he came to himself he found that he was lying among a dozen or fifteen wounded Baltimore men. As soon as well enough to leave he was put on a train to New York and thence sent to Lowell to recover from his wounds and rejoin his regiment.

The Death of Whitney and Ladd—It soon transpired that of the four men killed in the streets of Baltimore three were members of the Lowell City Guards: Addison O. Whitney, Luther C. Ladd and Charles A. Taylor. The last named, however, was not a Lowell resident, for he had joined the company in Boston, and, except that he was a painter by trade, very little was discoverable about him. The other two were inconspicuous but respected youths. Addison Otis Whitney, son of John F. and Jane B. Whitney, was born October 30, 1837, at Waldo, Maine, and had come to Lowell to take work in one of the spinning rooms. Luther Crawford Ladd, son of John and Fanny

Ladd, was born at Alexandria, New Hampshire, December 23, 1843. Before mobilization he was employed in the Lowell Machine Shop. Both these young mechanics were of exemplary character. In Headley's words: "At Lowell, on the fifteenth day of April, they dropped the garb of the artisan and assumed that of the citizen-soldier. Four days afterward, at Baltimore, their mortal bodies, bruised and lifeless, lay on the bloody stones of Pratt street, the victims of a brutal mob."

The assertion that the Sixth Massachusetts, with its large proportion of Lowell men, was "the first armed and equipped troop to respond to President Lincoln's call" has been disputed of late years, when there has seemed to be a conspiracy on the part of some writers to depreciate the Bay State and all its military achievements. The case for the leadership of the Sixth has had good support, amongst others, from a careful writer, "J. K. C.," in the notes and queries department of the "Boston Transcript," who states that although Pennsylvania troops did reach Washington a few hours before the Massachusetts men, these former were not armed and equipped troops. Benson J. Lossing, historian, is quoted as saying that the Pennsylvania companies, "were almost entirely without arms." They could hence have been of almost no use in defending the capital. Of the reception of the Sixth in Washington, Colonel Jones later wrote: "Such was the anxiety at Washington that on our arrival we were met by the President and Cabinet. President Lincoln grasped my hand and with tears in his eyes said: 'Thank God you are here. If you had not come we should be in the hands of the rebels before morning. Your brave boys have saved the capital, God bless them!'"

The dispute, which is of long standing, may be followed by the curious in a file of the "Independent" for April and May, 1886, in which the Massachusetts side of the controversy is summed up in articles entitled "The Claims of Certain Pennsylvanians to have been the 'First Defenders' of Washington." As historian of the Sixth Regiment, Colonel B. F. Watson, in his "Addresses, Reviews and Episodes, chiefly concerning the Old Sixth Massachusetts Regiment," brought together many data believed to be conclusive evidence that it deserved its accepted motto: "First to volunteer; first in the field; first to shed its blood; first to triumph."

Enlistments were wonderfully furthered in Lowell from the hour of receiving the first news of the riot in which the Sixth had protected itself from the Maryland mob. The armories were crowded with young men and old. The Light Guard made a record of enlisting sixty-four men in half an hour, and after they had signed up Hon. George F. Richardson came forward to write a check for one hundred dollars towards the needs of the company. Irish-American citizens were simultaneously forward with the formation of their company, to

which the name of the Hill Cadets was given in honor of Paul Hill, who took substantial interest in their efforts.

Meantime flag raisings occurred throughout the city. On Sunday a special train was run to allow citizens to attend a union meeting in Boston. Sermons were nearly all of a political nature, and groups of excited people talked war in the streets. The oldest inhabitant doubted if ever such a New England Sabbath had been seen before.

Civilian confirmation of the state of anarchy which prevailed in the border States was brought back to Lowell on April 26, on the arrival of J. N. Pierce, cashier of the Merchants' Bank, who in coming east from a western trip stopped off in Washington. From the National capital he took the train to Baltimore, where he had friends who advised him not, in the present state of feeling, to try to travel northward. On their counsel he even purchased a secession cockade, which he wore as a precaution. Determined to leave the city, he visited several livery stables, but was unable to secure a rig. Finally, in company with another man who had been driven out of Virginia, he succeeded in hiring an old broken-down horse and wagon, "the whole concern not worth ten dollars, for fifty dollars," with which they set out at a rate of four miles an hour for Havre de Grace. Both were desperately hungry. They called at houses on the road for food, but the inhabitants would not furnish it for love nor money. They finally reached the mouth of the Susquehanna in safety, and shaking the dust of Maryland from their feet, and throwing their cockades into the river, they were successful in arriving at Philadelphia.

The number of Lowell men enlisted was reported on May 10 to be rising 700. The details were as follows: Staff officers, 10; brigade band, 18; National Greys, Company A, 52; Mechanic Phalanx, Company C (including new recruits), 66; City Guards, Company D, 50; Watson Light Guards, Company H, 53; Richardson Light Infantry, 77; Hill Cadets, 74; Abbott Light Guard, 77; Lowell Light Infantry, 86; Butler Rifles, 85; enlisted in Regular Army, 56; total, 704 troops. It was noted that this enrollment involved about one in seven of the entire voting population.

The older men of Lowell in these first days of the war were equally anxious with the more youthful to be of service to the National cause. A home guard movement was initiated on April 23 when a group of the so-called Phalanx exempts, or older members of the Mechanic Phalanx who had passed the military age, met to organize a protective body. Six past commanders of the company were among the organizers: T. G. Tweed, James Dennis, Jonathan Kimball, N. S. Ramsey, J. G. Peabody and V. Ganson. At a subsequent meeting, on April 27, these officers of the "exempts" were chosen: Captain, J. G. Peabody; first lieutenant, A. R. Brown; second lieutenant, W. G.

Gray; third lieutenant, Reuben Frye; fourth lieutenant, Samuel Lawrence. This corps later took the name of The Lowell Veterans.

A report that the bodies of three victims of the Baltimore riot, either killed or mortally wounded, had reached Boston, stirred Lowell folk on May 2. The caskets were in charge of Merrill S. Wright, of the Richardson Light Infantry, who had been detailed for this purpose by Colonel Jones. They were temporarily placed in a tomb at King's Chapel. It was up to this time supposed that the slain men were Sumner A. Needham, Lawrence; James Keenan, Stoneham, and Edward Coburn, Lowell.

The following day people from Lowell readily identified two of the bodies as those of their fellow-citizens, Ladd and Whitney, of the City Guards. Both Keenan and Coburn, it was learned later, were severely wounded but not killed. On May 6 Captain Davis, with a detachment of the Richardson Light Infantry, and with members of the city government, went to Boston to receive the remains of these two young men.

Obsequies of the Baltimore Victims—Neither before nor since the Civil War has Lowell ever had any funeral more truly impressive than that of May 7, 1861, when the bodies of the youthful first victims of the conflict between armed feudalism and aroused industrialism were brought back to the city which but a few weeks before they had left resolutely and eagerly. At the railway station in Boston a striking address was made by Governor Andrew, and a response by Mayor Sargeant. The train reached the Middlesex street station, Lowell, at about one-thirty. The caskets were at once taken to Huntington Hall, where they rested in state during impressive exercises. A dirge was played by the Lowell Brigade Band. There followed a selection from the Scriptures, Rev. Mr. Homer; prayer, Rev. Mr. Cleaveland; anthem, sung by the St. Anne's choir; memorial address, Rev. W. R. Clark. A hymn for the occasion, which had been written by Rev. C. W. Homer, was read by Rev. J. J. Twiss and sung by the St. Anne singers. The benediction was spoken by the Rev. Mr. Hinckley. Then, with the band again playing a dirge, with the military at arms reversed, a procession formed outside the hall and solemnly marched to the cemetery, where bells tolled and minute guns were fired as the bodies were placed in the tomb. "Thus," according to the "Citizen" writer, "ended the most imposing funeral tributes ever witnessed in this city by its oldest inhabitants."

The citizens who had been reported as missing at the time of the outbreak were presently accounted for. A Boston gentleman, writing to the "Journal" on "Affairs at Baltimore," stated that on the Friday morning following the riot, he and a fellow townsman of long residence in the Maryland city went to the police station to offer to care

for the wounded. Here he found Sergeant J. E. Ames, of Lowell, and Private Edward Coburn, of Dracut, "with only such comforts as could be found in a police station." Mr. Ames, he said, had two severe scalp wounds from which he nearly bled to death, while Mr. Coburn was shot in the back just above the hip and was suffering from much inflammation.

On the 15th of May, Sergeant J. E. Ames, Corporal D. B. Tyler and Private Edward Coburn, who had been wounded at Baltimore, were brought to Lowell. They were met at the station by Mayor Sargeant and were placed in carriages to be escorted to their homes.

The further experiences of the Sixth Regiment during its three months' enlistment were less exciting than those of the initial journey. The troops did guard duty around the Senate Chamber, Washington, for some weeks. On May 6 they were ordered to the Relay House. There they did duty and in Baltimore until their term expired on July 29. Several letters from the camp at the Relay House were published in the local papers.

Priority of Lowell in War Service—Testimony to the priority of Lowell in the entering upon the civil conflict was borne amusingly in a paragraph by that brilliant Boston journalist, William S. Robinson: "Lowell seems thus far to have obtained greater distinction than any other place. General Butler has won greater fame than any other officer. Ladd and Whitney, of the City Guards, fell at Baltimore; John Butterfield, of the Zouaves, who fell by the musket of a sentinel, was also originally of Lowell; twelve companies have gone, or have enlisted for the war; and to make history complete on both sides, Winans' rebel gun, captured at the Relay House, was the invention of Dickinson, a dancing master, who formerly lived in Lowell; and John Abbott, who once helped edit a newspaper in Lowell called the 'Orion,' was drummed out of camp at Fort Warren [for his treasonable sentiments] on Monday last."

The activity of Lowell non-combatants in contributing to the comfort and efficiency of the troops was nationally commended throughout the war. It was as if the whole community were a unit in determination to win the contest.

As early as the second week in April the Lowell Soldiers' Aid Association was proposed, with the object of extending help which could hardly come from governmental sources.

Formation of the Soldiers' Aid Association—At a public meeting of April 15, 1861, the subject of ways and means to help the soldiers was broached. Three days later Judge Nathan Crosby wrote to the mayor suggesting that the sum of \$100, which he enclosed, be sent immediately to the paymaster of the Sixth Regiment to supply any

wants for which, in the haste of departure, no provision had been made.

He also suggested the formation of a society to meet the necessities which were not regularly provided for in the regular rationing and medical service. The mayor laid the matter before the city council, which authorized a subscription. Some four hundred dollars in addition to Judge Crosby's original \$100 were collected. On April 20 the mayor called a meeting "for the purpose of initiating measures for the comfort, encouragement and relief of citizen-soldiers." A plan of "practical sympathy" was devised by Judge Crosby: (1) For gathering such funds as may be needed; (2) for supplying nurses for the sick and wounded, when and as far as practicable; (3) for bringing home such sick and wounded as may be proper; (4) for buying clothing, provisions and all matters of comfort which would contribute to the soldiers' happiness; (5) for placing in camp such Bibles, books and papers as would interest and amuse on days of rest and quiet and keep the soldiers informed of passing events; (6) for gathering the dates and making a record of the names of each soldier and his history; (7) for holding constant communication with paymasters and other officers of our regiments, that friends may interchange letters and packages.

The officers of this Soldiers' Aid Association included representatives of many of the prominent families of the city. They were: President, Nathan Crosby; treasurer, S. W. Stickney; secretary, M. C. Bryant. Committee on collections—Ward 1, W. G. Wise, S. L. Dana, Edward Tufts, Mrs. W. G. Wise, Mrs. Paul Hill, Mrs. C. H. Sawyer, Mrs. J. B. Francis, Miss L. A. Kimball; ward 2, S. W. Stickney, Linus Child, H. W. Hilton, Mrs. Harlin Pillsbury, Mrs. Amos Rugg, Miss Myra Child, Miss Mary Read; ward 3, Isaac Fletcher, Samuel Convers, James Meadowcroft, Mrs. William North, Mrs. Joseph Tapley, Mrs. Cyril French, Mrs. J. W. Graves, Mrs. Daniel S. Richardson, Miss Fanny Reed; ward 4; Otis Allen, William E. Livingston, Josiah Gates, Miss Ellen Gates, Miss Augusta Watson, Miss Susan P. Cleaveland, Miss Elizabeth Watson, Miss Emma Horn, Miss Elizabeth Ordway; ward 5, James C. Ayer, W. S. Southworth, George W. Shattuck, Mrs. Alexander Wright, Miss Mary Miller, Miss Mary Carney, Miss Lucia Brooks; ward 6, J. G. Abbott, J. A. Goodwin, L. B. Morse, Mrs. J. G. Abbott, Mrs. B. F. Butler, Mrs. J. A. Goodwin, Miss E. Rollins, Miss F. Talbot, Miss M. S. Crosby. A committee on purchase of supplies consisted of Charles B. Coburn, J. J. Folsom, William Nichols; one on correspondence and forwarding, William G. Wise, S. D. Sargeant, Joseph F. Trott.

Knitting for the Soldiers in '61—Thereafter the Lowell men at the front always had committees of loyal women plying the needle in

their interest. Knitting was the order of the day in 1861, just as in 1917. Captain Edward Abbott's company, in the Second Regiment, was perhaps a little exceptionally favored in commitments from the Soldiers' Aid Association, for many of the most attractive and popular boys of Lowell had enlisted under that command. After a disastrous engagement in June, 1862, Captain Abbott wrote a personal letter to the association, stating the plight of his men who in a hasty retreat had been obliged to abandon everything except what they had on. He made a plea for towels, handkerchiefs, flannel shirts, sewing cases and similar articles. The result was an immediate meeting of Lowell women at the gas office to provide new outfits for these soldiers.

Among the first articles received by the Soldiers' Aid Association in April, 1861, was a pair of well-knit stockings sent up from Dracut by Mary Varnum Coburn, mother of George W. Coburn, and the only surviving daughter of Major-General Joseph Bradley Varnum, formerly speaker of the National House of Representatives. The patriotic knitter was then eighty-seven years old. Her gift had an interesting sequel. A notice of the receipt of the stockings was published in a local paper, and when the stockings, with many others, were unpacked at Fortress Monroe, the boys picked them out and drew lots for their possession. The winner of Mrs. Coburn's handiwork was Thomas S. Jones.

Hard Times in the War Years—Once the war was forward Lowell civilians, like others in the North, endeavored to live up to an ideal of "business as usual." This was not always easy, for the largest of the city's basic industries had been hard hit by the failure of the supply of its principal raw material, cotton. By midsummer, 1861, about the time the disastrous battle at Bull Run had shaken confidence in a speedy termination of the conflict, a distinct business depression fell upon the town. Many of the unmarried workers returned to the farms and country villages from which they had come to Lowell. Merchants of the city on July 25 held the first of several meetings in an effort to secure a temporary reduction of their rents. They circulated a petition to the following purport: "The undersigned, traders and occupants of stores in the city of Lowell, having severely felt the efforts of the universal depression of all branches of business, and seeing no prospect of a revival of the same during the present disturbed state of affairs, ask of our respective landlords, that, in consideration of the general stagnation, they may be willing to share humanely with their tenants—as in many other places—by making a proper reduction of rents during the present 'business panic'."

At a meeting of the petitioners on August 1 it was urged that a reduction of thirty-three and one-third per cent. be solicited as fair to

both sides. No substantial agreement, however, seems to have been reached at this time.

The industrial depression which was chronic from now on was attended by a monetary stringency which caused great annoyance to Lowell shopkeepers. In the summer of 1862 specie was so scarce that postage stamps were commonly used in making change. The Boston and Lowell railroad adopted a practice, which caused much indignation, of charging ten per cent. on all specie paid out in excess of twenty-five cents. It was urged that in retaliation the public should hold back ten per cent. of all change paid in for tickets; but it is not recorded that this drastic method was actually attempted. In December, 1862, arrangements were made so that postage stamps might be exchanged for lawful money and at once many of the traders drew from their cash boxes great quantities of stamps too soiled for postal use, which had passed from hand to hand.

Lack of cotton, of course, kept the leading manufacturing corporations of Lowell either idle or running on short time during most of the war years. It was an event to cause gladness among all classes of citizens when wagons appeared with a few bales of cotton to be carted from the freight depot. Prices as high as \$1.70 a pound were paid for raw cotton in the height of the scarcity.

Depressed though business was in Lowell there were some alleviating circumstances.

Many New England textile manufacturers were already evincing that adaptability which this trade very generally displayed in the later and greater crisis that began in 1914. They speedily discovered that if they could not do the accustomed thing there was often some other way of using their plant. Thus the Lowell company, finding it impossible to continue making carpets and rugs, readapted many of its looms for a "union" of worsted and cotton, and did a good business in this line. In some of the mills a policy was adopted, which has since become general in New England in times of depression, of making extensive additions and rearrangements, preparatory for the boom times that are sure to follow. This policy, while it does not find work for the idle textile operatives, gives a stimulus to the local building trades, just when they need it most, and thus helps to minimize the effects of the panic.

Another circumstance which materially relieved the industrial situation was the vivid activity of the Lowell Machine Shop, whose orders for one reason and another were unusually heavy. Employing many high-class mechanics this company's increased payroll meant substantial disbursements among the city's traders. Before the war the machine shop had been running with an average of 500 hands; in 1863 it reported about 800 on the payroll.

National and State disbursements on account of soldiers' pay and aid to soldiers' families also aided many families of modest circumstances. The eighteenth annual report of the City Missionary Society, issued in January, 1863, expressed some surprise that calls for assistance were fewer than normal. The circumstance was explained by the fact that a large portion of the male population had enlisted and that state aid for their families had become available to the amount of \$90,971.50 in one year. In addition to this disbursement, soldiers were sending home to their families about \$35,000 a month of the Nation's money. For these reasons many humble homes were more prosperous than ever before, and accounts in the savings banks were growing with considerable rapidity.

Mayor Peabody's inaugural of 1865 stated that the amount required for poor relief in the past year had been less than might have been expected for two reasons: Where workers found employment denied them in the factories, instead of remaining in the city in idleness, they went somewhere else in search of work. Again, the receipt of State aid for dependents of soldiers kept many poor families from want.

Migration from Lowell to the West must be counted in with army casualties and business depression as one of the permanent retardants which was much in evidence during the sixties. Then, as in all decades since, there has been a constant outflow of residents toward the newer communities usually with the double motive of an easier livelihood and a more agreeable climate. It is a criticism, furthermore, that applies to most other New England cities as well as to Lowell to say that industrial leaders of the community have shown surprisingly little imagination as to the ultimate effects of this migration. Could a deliberate policy have been adopted in trying to keep good citizens from going away it is safe to surmise that the growth and improvement of Lowell would have been much more rapid than it has been since 1860 and that the average quality of the population might have been even higher than it is to-day. Those certainly who had inducements to offer elsewhere did not fail to advertise their localities. One, for example, who in the war years drew a number of Lowell families to Portland, Oregon, was Franklin Cheney, who had gone to the valley of the Willamette and become largely interested in land promotions. A little later Southern California began to appeal strongly to a community in which consumption was very prevalent and was still supposed to be due rather to the New England climate than to faulty ways of living in that climate.

The population of Lowell in 1860 was 36,827. Amidst the extensive enlistment and the departure of individuals and families on account of the long business depression, the population fell, according

to the State census of 1865, to 31,004. The 1860 valuation of the city was \$20,874,207. In 1865 it was \$20,980,041.

Dr. Ayer's Exposure of Manufacturing Irregularities—Whether the Lowell manufacturing corporations, considered as an industrial group, were well handled or not during the war is a question that admits, certainly, of argument on both sides.

It may be maintained that the corporation treasurers from their offices in Boston were in close touch with the general situation; that they were far-sighted and progressive business men of one of the leading American commercial centres and that they did in substantially every respect what business prudence dictated.

That, on the other hand, in the exigencies of war time, these corporations suffered more severely than was needful by reason of inveterate nepotism and wasteful methods might be argued from such an exposure of "Some of the Usages and Abuses in the Management of our Manufacturing Corporations" as was made and published in 1863 by J. C. Ayer, M. D., of Lowell. The findings of this manufacturer of medicines, whose family has of late years been very closely identified with the textile industry, were certainly adverse to claims of efficient management among the Lowell companies. While some of the data which he adduced seem to be incontrovertible it might be noted, as a controversial counterweight, that Dr. Ayer, a graduate of the Lowell High School, may have been influenced by the anti-corporation prejudices of some of the older families of the community.

Complaints of mismanagement of some of the corporations had already been heard before the war, according to statements of fact made by Dr. Ayer. The Hamilton company was one of those whose management was especially under fire. At a shareholders' meeting it was charged that the treasurer sent his son, an inexperienced youth, to the South to buy cotton. Vendors took advantage of the boy's ignorance and, although he paid good money for his cotton, when the shipment arrived at Lowell it was found to be miserable trash, filled with sand and stones such that the bulk of it had to go to a waste pile. Through this piece of nepotism, it was charged, the Hamilton company lost about \$50,000. A committee of investigation was called for by the meeting, but, according to Dr. Ayer, this committee was packed with partisans of the management and the essential facts concealed in their report.

Shareholders of the Boott company, continuing the allegations of the foregoing, believing their property to be in an unnecessarily depressed state, organized a movement to secure an energetic treasurer. They were informed that one of the directors, a wealthy man, would supply the company with money and credit if his son-in-law should be elected to the treasurership. The desired action was taken by a packed

stockholders' meeting, "but not a dollar of either the money or the credit promised has been furnished to the Company." During the fifteen years prior to 1863 the Boott company paid average annual dividends of four and six-tenths per cent., but at that date an outlay of at least \$300,000 was needed to put the mills into even tolerable condition. At the outbreak of the war the company had in its warehouses about two million pounds of cotton. Had this accumulation been retained instead of being sold the profits from the retention would have sufficed to pay all the dividends of fifteen years, make the repairs above mentioned and still leave a surplus.

One of the frequent subjects of complaint among the shareholders was that of the amount of commissions paid to the Boston selling agents. A stockholders' committee of the Lowell Manufacturing Company (the so-called Carpet Mill) made a report of which this is a significant section: "During the period of seven years and five months from January 1, 1852, to June 1, 1859, there were paid to A. & A. Lawrence & Co.:

For commissions	\$182,056 81
Auction charges in 1855.....	16,946 99
Incidental expenses other than commissions.....	105,034 96
	<hr/>
	\$304,038 76

On gross sales to the amount of \$10,373,038.57, making \$40,993.31 per annum which you have paid to and through that firm from your profits."

It was further alleged that the same house served as selling agent for seven other manufacturing corporations, and that another reliable firm had offered to do this commission business at about half the then cost. "The present dividend, declared during the investigation of this committee, is the first semi-annual dividend of more than thirty dollars per share which has been made for twelve years. During that period our dividends have averaged semi-annually but seventeen dollars per share. Yet during this time other carpet establishments have been making large profits, and some individual manufacturers have become rich."

Concerning war conditions in the cotton industry, Dr. Ayer wrote caustically: "During many months most of the cotton mills have been stopped. The operatives and skilled workmen, not a few of whom are indispensable to the progress of the work, have been turned out without provision for the present or their future return. It is a significant fact that the officers still continue to receive their salaries in full. Not one, anywhere, that we can hear of has even been reduced. It serves to show who control the money and who get it. At the last meeting of the Hamilton Co., which has stopped work, it was proposed by a stockholder to reduce the salaries one-half and divide the

amount so saved among the workmen out of employ, but the proposition was voted down by the officers and their friends."

Another charge was this: While a late treasurer of the Massachusetts Cotton Mills was in office one of his family connection was employed to buy cotton for the Massachusetts, Boott and Merrimack mills, and for this work was paid in commissions about \$36,000 annually "without any risk, any investment of capital or even extraordinary skill." In the meantime, it was noted, the wages of operatives in these mills had been cut and strikes were threatened. The dividends to the stockholders were small and irregular. This treasurer, Dr. Ayer added as a final thrust, was responsible for the faulty construction of the Pemberton Mill, Lawrence, which had collapsed with loss of life.

It would certainly be faulty historianship to ignore these mid-century charges of incompetence and inefficiency of management in the Boston offices of the larger Lowell corporations. They have been recurrent in print and in current gossip from time to time in more recent years. At the same time whoever passes judgment on these charges must bear in mind long standing animosities between anti-corporation and pro-corporation factions in the community.

When all is said, it is hardly to be doubted that nepotism was, and to a certain extent still is, a crying evil in the management of New England textile properties.

Supplementing the information in Dr. Ayer's report on the statements concerning the commission house which handled a large percentage of the product of the Lowell mills, the original report, of July, 1859, by a committee of stockholders of the Lowell Manufacturing Company, contains a paragraph which shows to what an extent the earlier ownership of this house had passed at the time of the alleged abuses. "The firm of A. & A. Lawrence & Co. consists of five partners, C. A. Babcock, J. H. Wolcott, James Lawrence, Wm. G. Lambert and C. H. Parker. Thus the name itself is a fiction. The persons described by it, Amos and Abbott Lawrence, have, with their talents and their influence, passed away; and yet we are paying our proportion of a tribute over twice as large as the house received when its able founders were living and active in it."

This report further stated that the commission system had long since been abandoned in Great Britain and that its usefulness in this country was already questioned. "Successful manufacturers in Rhode Island, and various sections of the country, state that they sell all their goods far better themselves and at less cost for selling than they can have it done for them by any commission house. They obtain better prices, because they have the undivided attention of men de-

voted to their interests." The committee signing this report was composed of James C. Ayer, Peter Lawson and Horace J. Adams.

Municipal Affairs During the War—The city government during the critical war time continued to be solid and substantial. The elections of four years were the following choices for mayor and aldermen: 1862—mayor, Hocum Hosford; aldermen, Merton C. Bryant, Edwin A. Alger, James B. Francis, William A. Burke, Isaac F. Scripture, Aldis L. Waite, Albert Wheeler, Jonathan P. Folsom. 1863—mayor, Hocum Hosford; aldermen, James B. Francis, Edwin A. Alger, Abiel Pevey, William A. Burke, Isaac F. Scripture, Otis Allen, Albert Wheeler, William Nichols. 1864—mayor, Hocum Hosford; aldermen, William S. Southworth, James B. Francis, Dana B. Gove, William T. McNeill, George W. Norris, George Runels, Cyrus H. Latham, George F. Richardson. 1865—mayor, Josiah G. Peabody; aldermen, Edward F. Watson, George W. Norris, Dana B. Gove, William T. McNeill, Henry H. Wilder, Josiah Gates, Cyrus H. Latham, William Brown.

Mayor Hosford, who held the chief office during three years, was one of the foremost business men of his day in the Merrimack valley. He founded the mercantile establishment which at this writing is continued under the name of his junior partner, A. G. Pollard. He was shareholder and director in many manufacturing and commercial enterprises. Born at Charlotte, Chittenden county, Vermont, he had brief but intensive education at Sherburne Academy and before he was twenty-one was teaching district schools. His father's farm was favorably situated and would have offered young Hosford a chance to succeed in a rural neighborhood. In 1845, however, he determined to try his fortune in a city. He arrived at Lowell on September 5, 1845, and soon found work as office boy and clerk in the dry goods store of Gardner & Wilson, at an annual salary of \$150, out of which he must board and clothe himself. The youth stayed his year out in this establishment and then went over to the store of Daniel West, where he was paid a dollar a day. In this position he remained for four years, during the last two of which he had full charge of the store. Having accumulated about a thousand dollars Mr. Hosford presently bought out his former employer and established the firm of H. Hosford & Company. In 1860 he came into public service for the first time through his election to the common council. The following year he was chosen alderman. His third mayoral election was practically unanimous—an unprecedented event in Lowell politics. After the war his career was thoroughly notable down to his lamented death in 1881.

The efficient and popular city clerk throughout the war years was John H. McAlvin, born in Lowell, August 2, 1831, a son of John McAlvin, who had come to the city from Antrim, New Hampshire.

Mr. McAlvin was a graduate of the high school in the class of 1849. After leaving school he was employed for a short time in the counting room of the Hamilton company. Thence he was appointed to a clerkship in the post office under Postmaster Alfred Gilman. He served in this capacity for eight years. In January, 1858, he was chosen city clerk. He was highly respected and thoroughly popular as a public servant. Later he became city treasurer and in 1894 treasurer of the Lowell Electric Light company. His death occurred in 1896.

Lowell's First Street Cars—Not many new enterprises, for obvious reasons, were undertaken at Lowell during the Civil War. One notable form of public service, nevertheless, began to be developed in the years of conflict. Modern street car transportation reached Lowell in the early sixties. Starting in New York City in the fifties, with the celebrated "John Mason," horse railroad systems had begun before the war to be projected in several communities. On March 26, 1856, was opened the first horse railroad in New England, that connecting the city of Boston with Harvard Square, Cambridge, a line of eight-foot strap rails, laid with the ends touching so tightly that in the heat of the first summer they buckled up and made riding in the cars not unlike an ocean voyage. From this crude beginning the technique of urban transportation began to be discovered rapidly.

The first intimation of an improvement of this sort for Lowell came in December, 1862, when a petition signed by Peter Lawson and N. Mickles was sent to the legislature asking for incorporation of "The Lowell Horse Railway Company," with a capital not to exceed \$50,000. It was purposed to build the first line from Pawtucket bridge along Pawtucket street, Merrimack and East Merrimack streets to Nesmith street. The company was duly incorporated in the following April with an authorized capital of \$100,000 and a paid-up capital of \$40,128. On March 1, 1864, the system was opened. The promoters' plans had been enlarged, for in addition to the line from Belvidere to the head of Pawtucket bridge one was laid from the post office, in Merrimack square, to Whipple's Mills, via Central street, and one through Middlesex street to the old Lafayette House. Later extensions were on Westford and Chelmsford streets.

Best Days of the Lyceum Bureau—Socially considered, Lowell seems not to have been greatly paralyzed by the feverish interest of many of its people in national events. The department of "city affairs," which was a daily feature of "The Citizen," abounds with paragraphs which are often amusingly indicative of the amusement of the people.

At one extreme of intellectuality were the lecture courses of the Middlesex Mechanics' Association. To the hall of this institution in Dutton street came the foremost men of letters and science with talks

that were often reported verbatim in the press. The lecturers, indeed, who came to Lowell under these auspices, were of a celebrity to excite the envy of present day committees of the Middlesex Women's Club. Ralph Waldo Emerson, Wendell Phillips, George William Curtis, John B. Gough, Artemus Ward, J. G. Holland, William Lloyd Garrison, Josiah Parsons Cooke, and many other men of similar calibre and distinction, gave their war time views on matters of national or personal interest to Lowell residents.

The churches during the first years of the decade were apparently much exercised over increasing intemperance in the city. Whether this manifestation was real or not would be difficult to say, as drunkenness was certainly very common in the preceding decades. An impression, at all events, was abroad that the evil was actually growing, and temperance orators were frequently welcomed. Anti-rum agitation was one of the features of the winter of 1861. In January, William Adams, Jr., agent of the Massachusetts Temperance Alliance, spent several days in Lowell. He met large audiences of children twice—once at Huntington Hall, on January 5, and again at the Unitarian church, upon initiative of Rev. Frederick Hinckley. On Sunday, January 6, he made a stirring address before an audience of about 1,500 adults in Huntington Hall and received pledges from some thirty or more of those present. "Milo," at about this time, wrote to the "Boston Journal:" "There is no denying the fact that there is too much intemperance in our city—it always has been so—and something should be done to check it as much as in times past." In 1862 and 1863 there were several vigorous "drives" against intemperance.

The Musical Lews—For professional music and drama the community was increasingly dependent upon Boston. For its local musical entertainments the Pawtucketville church continued to have a unique reputation. The presence in this suburb of members of the musical Lew family contributed much toward the success of such musicales as one thus recorded under date of January 29, 1861: "The vestry of the West Dracut meeting-house was packed full even to repletion at an early hour with an appreciative audience, and at seven the concert commenced with a 'quickstep' upon the clarionet by Mr. A. Lew, with a drum accompaniment by Masters Johnnie and Fred, executed with great skill and precision; indeed the little fellows deserve a sheepskin for the ability with which they used one last night. The programme was of considerable length, and embraced a great many of our 'popular' melodies; want of space prevents noticing at length. Among the songs the 'Cottage by the Sea' was rendered in fine style by Misses Lizzie and Mary, and the 'Ole Virginny Neber

Tire' of Mr. A. Lew brought down the house." The Lews a generation later were succeeded by the well remembered "Happy Hazards."

Chelmsford Centre, though further from the city than Pawtucketville, was a musical rival. In the newspapers one encounters such paragraphs, suggestive of fun and frolic, as the following of February 13, 1862: "The annual circle by the ladies of the Union Parish in Chelmsford Centre comes off at the town hall this evening. As the sleighing is excellent, and the moon bright, probably quite a delegation of our citizens will visit the 'old folks' who intend to sing their best. The 'young folks' will improve the time from ten till two, 'and whirl themselves with strict embracements round.' Music will be furnished by a quadrille band from this city, and refreshments will be furnished the hungry. Our Chelmsford friends extend a hearty welcome to all."

Mid-Century Winter Sports—Winter sports were cultivated almost as assiduously as now.

Skating, naturally, had great vogue as an amusement. It was all outdoor skating prior to the coming of the roller rink craze in the seventies and early eighties. The brothers William and Luke McFarlin conducted a skating park north of the city and in the season ran their sleighs, according to an advertised schedule, starting from the Washington House and stopping at the post office and Rogers' hardware store. A rival skating park was Greenleaf's, at Ayer's City, connected with which was "a saloon with convenient rooms for warming." Both these resorts conducted skating matches at which prizes were given with juries of distinguished citizens awarding.

Old fashioned sleighrides, too, were popular in a city which had never outgrown taste for country pastimes. In the papers of the sixties one comes across many such news stories as the following from "The Citizen" of successive dates, January 25 and January 26, 1862:

A Sleigh Ride—The "old timers" of this city are to have an old-fashioned sleigh ride this afternoon to Nashua, New Hampshire. They will go up in single teams, and will stop at the Indian Head Coffee House and partake of a supper, and return home in the evening. They will have a big time.

The Sleigh Ride to Nashua—Some forty couples of the "old timers" went to Nashua yesterday afternoon, and partook of a splendid supper at the Indian Head House. They returned about 12 o'clock. The sleighing is good, but it is almost impossible for a large team to turn out. One double team capsized going up, but no damage was done, except the spilling of a few chips.

The Development of Willow Dale—Willow Dale, for many decades a principal pleasure resort and picnic ground for Lowell people, situated on Tyng's Pond, four miles northwest from the city,

had its first extensive development about the outbreak of the war. The grounds were laid out tentatively in the summer of 1857. The distinctive features of the place were due to the exuberant imagination of its originator and first proprietor, the late Jonathan Bowers, a descendant of Jerathmeel Bowers, encountered in an earlier section of this history as one of the first settlers and as proprietor of the neighborhood's first distillery. Mr. Bowers was a man of marked originality, as indicated by the contribution, already referred to, which he made to the Mechanics' Fair of 1851.

The sports and amusements which "Johnnie" Bowers, as he was universally and affectionately known, brought to generations of Lowell young people and others for almost half a century were almost too many to be recalled. A genuine lover of nature, the proprietor of Willow Dale spent the greater part of his working life in enjoying and proclaiming the charms of a lake which he quite honestly believed to be the most beautiful in the world. There was considerable substance, furthermore, behind his publicity, as is evident even now when the tasteless building of movie houses, casinos and closely packed summer cottages has hurt the native beauty of the larger body of water and its pretty confluent, Mud Pond. While it, of course, never has had the wild grandeur of some of the mountain lakes of this continent, Tyng's Pond, or Lake Mascuppic, as it is the fashion to name it, was half a century ago almost ideal for quiet restful beauty. Its fringe of white pine was as fine as any in New England. The water was crystal clear, the shores prevailingly sandy. To give variety of skyline on the southern side Huckleberry Hill, surely worthy of a more romantic name, rose in two rounded drumlins between which was a pretty miniature pond. Directly under this hill, in the centre of the largest woodland district of northeastern Massachusetts, was the nearly circular Mud Pond which drained through a reedy brook into the larger body of water. The outlet, too, of Mascuppic, a sizable stream issuing from the northwest corner, had picturesque beauty. Everywhere in the coves of the lake were the frequent water lilies.

On the southern shore, reached in those days by carriage or "barge" via Pawtucketville and the Mammoth Road, Mr. Bowers built up his "Willow Dale." The war did not interrupt but perhaps rather accelerated his activities. In July, 1861, he announced to the citizens of Lowell a most instructive and real thrilling ceremony. He had secured for installation in his grove the identical figure of General Andrew Jackson whose head, as older people in New England well remembered, had been mysteriously sawed from the prow of the U. S. "Constitution," as she lay moored at Charlestown on July 2, 1834. This act of profanation, an indication according to Democrats of the degree of animosity with which his political opponents pursued the

doughty hero of New Orleans, had caused intense excitement at the time. Commodore Elliott of the United States Navy offered a reward of one thousand dollars for any clue to the perpetrators of the outrage. Nothing was ever discovered, and the headless torso was at last removed and stored in a wool loft in Boston. There it lay unnoticed for many years until one day Mr. Bowers' attention was called to it. He saw both advertising and decorative possibilities in the piece which he bought and then hired a wood carver to make a head as nearly like the original as could be devised from the data available.

Such was the story of the colossal figure of Andrew Jackson in full uniform, hat in one hand and the constitution in the other, which has looked down upon hundreds of Sunday school picnics since July 4, 1861, when it was dedicated with an imposing ceremonial.

Mr. Bowers believed in newspaper publicity, and the display advertisements which he ran summers must have kept his public entertained even while they delighted the souls of newspaper publishers. The amount of free publicity which he secured was very considerable, for every Sunday school picnic or other affair held at the Dale was duly chronicled. "Johnnie," however, was aware of the advantage of buying space and filling it with distinctive and eye compelling copy. At a time when most advertisers were content to take an inch or two for insertion of a business or professional card he frequently announced the attractions of his resort in a third of a column or more. He essayed flowery rhetoric, and sometimes he burst into verse, as on June 20, 1863, when he filled nearly half a column with six-point poetry and prose of which these stanzas are typical:

The horses now with nimble tread
Along the streets resounding,
And o'er the river's rocky bed
Toward Willow Dale are bounding.

More harmless mirth and frolic now
Are needed without question;
The best—as doctors now allow—
Specific for digestion.

If there is one whose cheerless turn
Demands a kind adviser,
Go to Willow Dale and learn
To be a little wiser.

For all his persistent energy in promoting Willow Dale it may be doubted if Mr. Bowers' war time business was altogether satisfactory. In the spring of 1865 he appeared with a large display advertisement offering the place for sale on the ground that he wished to seek a more agreeable climate. He then lists surreys, flatboats, summer houses, modern stables, cooking utensils and the other accessories enough to equip a small cantonment. No one else, apparently, cared

to assume the responsibility of trying to make an honest dollar from this resort. It remained in and on Johnnie Bowers' hands during the rest of his long life.

Bartlett vs. Mann Schools in the Old Days—Young America found its amusements taking a martial turn as the war progressed. The pitched battles, at any rate, that old school boys of the Pawtucket street district and the Acre remember as frequently occurring between partisans of the Bartlett and Mann schools were particularly acrimonious in 1862 and thereafter.

Nothing more amusing, more ridiculous and more dangerous than these battles on the North Common and the nearby streets could be conceived. In the memory of the present historian, they took place mainly when soft snow gave an excuse for loading snowballs with hard stones and heavy bits of lead. The gangs were regularly captained. In addition to the pitched fighting there was much guerilla warfare. Lone youngsters who strayed out of their own habitat were liable to be set upon in out-of-the-way streets and alleys by a trio or sextet of the opposite faction and well-nigh beaten to death. Not until the leaders of the gangs met in high school classes did they ever shake hands.

Memories of some of these contests on the North Common come uppermost in reading such a news story as this of May 9, 1862:

School Boys Fight—For several days past the boys connected with the Bartlett and Mann grammar schools in the north part of the city have had several well contested battles on the North Common in which stones, bricks and clubs were used freely, and some have been severely injured. They have leaders and go in for open field fights, without intrenchments, and this morning the battle was opened by a pair of skirmishers posted behind a board fence. The lines of battle were drawn, but an engagement was prevented by the intervention of a foreign power, the police, led by the city marshal. The two leaders, Dunlavy of the Mann and Ashton of the Bartlett school, were arrested and will be examined at the Police Court.

These combats were evidently a historic survival from the first days of occupancy of the Acre. In describing conditions in 1832 the author of "Loom and Spindle" states that pitched battles took place between the Irish boys and the native boys "all the way from the Tremont Corporation (then an open field) to the North Grammar School house, before we girls could be allowed to pursue our way in peace." Fathers and brothers of the contestants sometimes joined in the fray evenings.

Appearance of the "Art Panoramas"—Except for portrait painting the fine arts were but little cultivated in Lowell in war times. The day of visiting exhibitions of canvases and sculptures by leading American artists was not yet.

One form, however, of the art of painting became very familiar to Lowell folk soon after battles in the Southland began to be reported. The panoramas and cycloramas and other large pictorial representations of the Civil War, which measurably played the part later to be taken by the "movies" in disclosing sights of the battlefields, began to visit Lowell early. Their advertisements and reading notices were usually marked by a philistinism which makes the sophisticated reader of to-day smile, even while he recalls receiving notices in very recent years from the "art managers" of Boston department stores that for bombastic absurdity would quite outdo the publicity style of 1861.

One of the earliest of these traveling spectacles to come to Lowell was that devised by Brigham Bishop. It was duly announced in a "reader" in the following extravagant terms: "Bishop's Mammoth Exhibition of the War. This great work of art is coming, and will open at Huntington Hall on Monday evening. The press throughout the country are loud in its praise. The paintings are acknowledged the best ever put on canvas; they are up to and include Fort Donelson. This last scene is the largest, and cost more than any panoramic scene ever exhibited. The great variety of the entertainment which consists of panoramas, dioramas, dioptics, music &c., cannot fail to draw a full house. It is on the all absorbing themes of the day—the great rebellion. We advise all to attend and see the places where our brave sons have won laurels. See advertisement."

A little more than a year later, specifically on April 25, 1862, another panoramic spectacle was promised. "A new panorama of the war, painted by those talented artists, the brothers Pearson, formerly of this city, will be exhibited here before long. It has had a very successful run in Providence, R. I., Worcester and other cities, and local papers are loud in praise of the paintings." Continuing, the account offers as a special inducement that the panorama displays a "correct view of the engagement between the Monitor and the Merrimack." This entertainment took place on April 28. It was unqualifiedly successful, in part, doubtless, because the Pearson brothers took large advertising space to proclaim "the only complete artistic work of the kind in existence, being a complete history of this great contest."

Return of the War-Worn Sixth—The Sixth Regiment's first home coming after its three months' service was celebrated in the early days of August. The troops reached Boston in the afternoon of the first and formed for a parade, at the head of which Miss Jones, "daughter of the regiment," as well as of its colonel, rode a milk white horse. Patrick Sarsfield Gilmore and his celebrated band turned out to make martial music. The regiment finally went to its headquarters in Faneuil Hall.

The next day—an intensely sultry day—the troops detrained at

Lowell. Their line of march ran from the Merrimack street depot to Central, to Tyler, to Lawrence, through Church and Andover to Nesmith, to East Merrimack, through Central, Gorham and Appleton to the South Common. At this destination they were drawn up in hollow square and addressed by Mayor Sargeant. Late in the afternoon they reassembled at Huntington Hall for a reception, at which the civic authorities of Lowell, Lawrence, Acton and Groton were present. A collation was served. The "daughter of the regiment" was loudly called for and required to stand forth with her mother, who was also present. Both were cheered to the echo. A lively day, therefore, it was in Lowell when the Sixth came marching home and, according to the newspapers, the light-fingered gentry did a flourishing business among the simple country people who came to town to witness the celebrations. One member even of the city government of bucolic Lawrence had about eighty dollars lifted from his pocket.

The Sixth Regiment, it should be added, was afterwards reorganized, went once more to the front and did gallant service. Captain Follansbee became its colonel. Other officers were: Lieutenant-colonel, Melvin Beal, of Lawrence; major, Charles A. Stott; surgeon, Walter Burnham, M. D.; assistant surgeons, O. M. Humphrey and G. E. Pinkham. The regiment reënlisted for nine months. It was ordered to Fortress Monroe. It later saw service in Virginia. In the skirmish at Carrsville, Anson G. Thurston and George I. Fox, both graduates of the Lowell High School, were killed. The regiment came home for a second time on May 29, 1863, and then went out again for one hundred days.

Some account should be given of the Massachusetts regiments besides the Sixth, in which considerable numbers of Lowell men enlisted. Individuals, resident or formerly resident in the city, of course, served in various departments of the army and navy, and not always under Bay State colors. A majority, however, of those who went out were enrolled in a few regiments whose careers may be sketched briefly.

Lowell Men in Other Regiments—The Second Massachusetts, to which the Abbott Greys were attached and which suffered the loss of Captain Edward Abbott at Cedar Mountain, was in action during several of the crucial engagements of the war. After Chancellorsville it mourned its acting colonel, Captain Salem S. Marsh, a Lowell boy, a West Point graduate and one of whom a fellow-officer wrote: "The army has lost one of its best leaders. Every officer and man deploras his loss."

At the expiration of its term of service the Second reënlisted and took part in the great battles of Antietam and Gettysburg. In the Atlanta campaign it was attached to the Twentieth corps under Major-

General Joseph Hooker. It then had as commanding officers Colonel William Cogswell and Lieutenant-Colonel Charles F. Morse. On the "March to the Sea," the Second was joined by the Thirty-third Massachusetts. After its long and honorable service it was mustered out and returned to Lowell under command of Colonel Francis.

The Thirteenth Massachusetts Regiment contained a few Lowell soldiers. At Chancellorsville George Bush, captain of Company B of this regiment, was slain. Attached to the Thirteenth as assistant surgeon throughout the war was Lloyd W. Hixon, formerly sub-principal of the Lowell High School.

The Hill Cadets, formed largely among Americans of Irish birth or ancestry, shortly after the firing on Fort Sumter, were led by Captain Patrick S. Proctor. The Butler Rifles, who took their name out of compliment to Lowell's famous civilian soldier, were commanded by Captain Thomas O'Hare. Both the Hill Cadets and the Butler Rifles were attached to the Sixteenth Massachusetts Infantry. They participated in the battles of Fair Oaks, Glendale, Malvern Hill, Fredericksburg, Chancellorsville, Gettysburg, the Wilderness, Spottsylvania, the Pamunkey and Petersburg. Their colonel, Powell F. Wyman, was killed at Glendale and Lieutenant James B. Darracott fell at the second battle of Bull Run. At Spottsylvania these two Lowell companies helped to defend the "Bloody Angle" where the "Stars and Stripes and Stars and Bars nearly touched each other across the works." In this encounter the Sixteenth lost its brave colonel, Waldo Merriman. At Gettysburg the young men from the Acre were again conspicuously efficient. In the thickest of the fight was killed Captain David W. Roche, of Company A, who had enlisted as second lieutenant of the Hill Cadets. Some one has written of him: "He was one of Ireland's most noble sons, possessed of the real Irish impetuosity and courage."

The Nineteenth Regiment had a considerable Lowell delegation in its ranks. This command stood against the celebrated Pickett charge at Gettysburg, which was the turning point of the war. One of its conspicuous losses at Fredericksburg was that of Lieutenant Thomas Claffey, born at Manchester, England, but educated in the public schools of Lowell. He had just been brevetted captain for bravery on the field. At Cold Harbor, Captain Dudley C. Mumford, who had enlisted from Lowell in July, 1863, was killed.

Only a few men from the Spindle City were in the Twentieth Massachusetts, but eminent among them was Henry Livermore Abbott, son of Judge Josiah G. Abbott and younger brother of Captain Edward G. Abbott, of the Abbott Greys. At nineteen this grandson of the founder of Belvidere enlisted in the Fourth Battalion of Infantry. He later was transferred to the Twentieth Regiment as second

lieutenant. Despite his youth he showed great executive capacity and received rapid promotion, reaching the grade of brigadier-general. His regiment was at Ball's Bluff, Fair Oaks, Antietam, Fredericksburg and Gettysburg. At the last-named battle General Abbott was shot down while leading a desperate charge. His death following upon that of his brother, deeply saddened his father's life.

Three Lowell companies were in the Twenty-sixth Regiment, which was organized in August, 1861, for three years' service. Its commanding officer was Colonel Edward F. Jones, of Pepperell, who had been at the head of the Sixth in the march through Baltimore. This command left Camp Chase in November, 1861, and proceeded to Ship Island as part of General Butler's force in the Department of the Gulf. These men gave especially good account of themselves in the campaign for New Orleans. In writing of the surrender of Forts Jackson and St. Philip, General Butler says: "My brave and enduring soldiers of the Twenty-sixth Regiment waded in the swamps to the rear of Fort St. Philip up to their armpits in water in order to cut off its garrison and get ready to assault the enemy's works, and to their efforts and that of their comrades, and those alone, is due the surrender of Forts Jackson and St. Philip."

The Thirtieth Massachusetts Regiment, which General Butler personally organized, had four companies, B, C, F and M, which were largely made of citizens of the Spindle City. The commander was Lieutenant-Colonel Jonas H. French, the chaplain, Rev. John P. Cleveland. The regiment joined in the expedition to Ship Island. It was engaged in the battle of Baton Rouge and at other operations in Louisiana. In Company A of this regiment was the famous Captain Timothy A. Crowley, who had been color-bearer of the Sixth Regiment when it marched through Baltimore, and whose untimely death was deeply regretted in his home city. Captain Crowley was born at Lowell, February 14, 1831, was educated in the public schools and was trained as a machinist. After working for some years at his trade he went upon the police force and in 1858 was appointed deputy marshal of the city. He died at New Orleans, October 5, 1862, of intermittent fever. His remains were buried in Lowell with military honor, October 26, 1862.

A very distinguished Lowell citizen who began his military career in the Thirtieth was General Charles Augustus Ropes Dimon, born at Fairfield, Connecticut, April 27, 1841, and educated at the academy in that town. At 16 young Dimon became a clerk in the office of his uncle's firm, R. W. Ropes & Company. He enlisted April 17, 1861, as a private in the Eighth Regiment of Infantry, Massachusetts Volunteer Militia. He was commissioned first lieutenant adjutant of the Thirtieth Massachusetts Infantry, February 20, 1862, and major

of the Second Louisiana Infantry, United States Volunteers, October 20, 1862. He resigned from the Louisiana regiment, January 23, 1863, to become recruiting officer of the Point Lookout prisoners of war camp. On March 8, 1864, he was commissioned lieutenant-colonel of the First Infantry, United States Volunteers, March 8, 1864. His gallant and meritorious services throughout the war resulted in his being breveted brigadier-general, United States Volunteers, March 13, 1865. Of General Dimon's merits as an officer, General Butler wrote in his autobiography: "In the matter of enlistment of ex-Confederates at Point Lookout, where out of 10,000 prisoners two regiments of infantry were enlisted, thus saving 2,000 men and \$2,000,000 in expense of recruitment and bounties to the loyal States, this work was done by a young officer from Salem, Massachusetts, Colonel Charles A. R. Dimon. He went out with the three months' men, and later I promoted him to be colonel. He took command of this enlisted regiment which did most efficient service." After the war General Dimon for many years directed the affairs of the United States Cartridge Company at Lowell.

Some 250 Lowell men enlisted in the Thirty-third Massachusetts, which left Boston in August, 1861, for the seat of war. This regiment was sent to Alexandria, Virginia, where its first duties consisted of "emptying whiskey barrels and handling rough customers." The men had a taste of picket duty at Bull Run Ridge. After some months of guard and fatigue duty the regiment got into the battle of Chancellorsville. Naional fame came to it a little later through its impetuosity in the battle of Lookout Mountain, where it was one of "Fighting Joe" Hooker's regiments that scaled the peak and fought a stirring battle above the clouds. This Bay State troop was with Sherman on the "march to the sea." After the termination of the march across Georgia and the junction of the military forces from the west and the naval forces from the east, General Sherman selected his brother-in-law, Colonel (afterwards General) Thomas Ewing and Lieutenant (afterwards Captain) Joseph P. Thompson, of Lowell, to go under a flag of truce towards Augusta to demand the surrender of Savannah. They were met between the lines by a Confederate flag of truce carried by officers who laughingly announced that they would see the city's streets swimming in blood before they would surrender. A little later, however, they changed their minds as they witnessed Sherman's elaborate preparations to bring his siege artillery against the city. The Thirty-third, with the Second Massachusetts, continued with Sherman in his march up through the Carolinas and witnessed the surrender of General Johnston at Raleigh, one of the closing events of the war.

Several Lowell men were in the Fifteenth Light Battery, which was mustered into service at Fort Warren, February 17, 1863. Timo-

thy Pearson, of Lowell, was its first commander and among the officers were two of his fellow townsmen, Albert Rowse and Lorinth Dame. The battery was sent to Louisiana. It served during the remainder of the war until mustered out on August 4, 1865.

The Richardson Light Infantry was so named from Hon. George F. Richardson, who generously contributed time and money toward its organization. It became known as the Seventh Battery. It saw active service at Fortress Monroe, Norfolk, Yorktown and Suffolk, Virginia. Later it was ordered to the Department of the Gulf, where it participated in several engagements.

The principal cavalry commands organized in Lowell were three companies of horse formed at Camp Chase and sent on January 2, 1863, to Ship Island. In the following June these companies were attached to the Third Massachusetts Cavalry. Their respective captains were S. Tyler Reed, James M. Magee and Henry A. Burrage. Edward J. Noyes, afterwards mayor of Lowell, succeeded Captain Magee for a short time. Captain Burrage was drowned in the Mississippi river and was followed in command by Solon A. Perkins, also of Lowell, who was mortally wounded at the battle of Clinton, June 3, 1863. C. C. Chase wrote of him: "Lieut. Perkins was one of Lowell's bravest sons. The city had no more costly sacrifice to lay on the altar of patriotism. He was the son of Apollos and Wealthy Perkins, of Lowell. He fitted for college in the High School, and was a fine classical scholar. After several years spent in mercantile employment in Boston and afterwards in South America, he returned to Lowell, and early in the Rebellion entered the service of his country. As commander of cavalry he exhibited an intrepidity and daring which won the admiration of both of friend and foe."

Lowell in the Navy, 1861-65—The services of Lowell men in the navy during the Civil War were hardly so conspicuous as those of the men in the army. The late Charles Cowley, nevertheless, found much to record in a paper which he delivered before the Old Residents' Association in August, 1893.

From this account it appears that at the outbreak of the war, when Gideon Welles took charge of the navy, no Lowell man of commissioned rank was in any department of the naval service, though Gustavus V. Fox, a high school classmate of General Butler, had resigned a commission a short time before.

Fox's career during the struggle is, naturally, traced in some detail. This Lowell man watched the growth of the secession idea from the day of Lincoln's election. In January, 1861, he submitted to President Buchanan a plan, which was rejected, for relief of Fort Sumter. He returned to New York from Charleston on April 18, the day before the bombardment. Several public-spirited men at this moment were

equipping the steamer "Yankee" to keep clear the water line to the national capital. From Commodore Breese, commandant at the metropolis, Fox received the following order:

New York Navy Yard,
April 25th, 1861.

Sir:—You are hereby appointed an acting lieutenant in the Navy temporarily, and will take command of the steamer Yankee, now fitting out at this yard for service. All persons on board are required to obey you accordingly. Respectfully your obedient servant,

MR. G. V. FOX, New York.

S. L. BREEZE, Commandant.

This, according to Cowley, was the first appointment of a volunteer naval officer during the war. Fox, it should be added, took the "Yankee" to Hampton Roads and thence to Annapolis, where he placed the vessel in the hands of General Butler. He himself proceeded to Washington. A commission as commander in the navy would have been his for the asking, but he decided to accept a tendered position as Assistant Secretary of the Navy. His services in that capacity belong to the general history of the Rebellion. He died in New York, October 29, 1883. Some thirty-eight other Lowell men held naval commissions during the war.

Rallies for Lowell Recruiting—Even as recruiting became more difficult throughout the north, Lowell and its surrounding towns continued to bear a good reputation for always filling out their quota, and a little more. Popular interest in the war was not permitted to flag. On July 12, 1862, for example, was held in Huntington Hall the first of several mass meetings in the interest of enlistment. Mayor Hosford presided. There was a patriotic address by Adjutant-General Schouler and briefer exhortations by these home speakers: A. R. Brown, T. M. Sweetser, D. S. Richardson, John F. McEvoy, E. A. Alger, James Dean, B. C. Sargeant, Tappan Wentworth and John Wright. Dracut, too, which still included the Pawtucketville suburb of Lowell, lived up to its Revolutionary fame as a centre of devotion to military duty. It was reported on August 19, 1862, that the town's full quota of twenty-two three-year men was made up, and on that day a mass meeting was held in the town house, presided over by George W. Coburn as first selectman, at which it was resolved to appropriate \$100 for each volunteer, thirty responsible citizens offering guarantees that this amount would be paid. On August 25 a Dracut correspondent of "The Citizen" reported: "We learn that the full quota of men for the nine months' term was obtained on Friday evening, with a few extra ones for contingencies."

A statistical epitome of what Lowell had done in the war was prepared soon after the close of the conflict by the mayor of the city. The figures in this summary help to understand why the city's population

was considerably less in 1865 than in 1860; though, of course, the enlistments and casualties were not the only cause. The city's record follows:

1861—April 15, call for 75,000 men for three months. Lowell furnished 223 men, at a cost of \$596.08; average cost, \$2.67 3-10.

1861—May 3, call for 50,000 men; July 1, call for 600,000. Our quota under these calls was 2,098 men for three years. The number recruited was 2,390, at a cost of \$65,861.78; average cost, \$27.48.

1862—August 4, call for 300,000 men for nine months. Our quota was 235. We enlisted and furnished 557 men, at a cost of \$22,162.25; average \$35.78 8-10.

1863—October 17, call for 300,000 men. We furnished 211 men, at a cost of \$902.30; average cost, \$4.27 6-10. The report of the Adjutant-General, January 1, 1864, stated that we had at that time a surplus of 179 men.

1864—July 18, call for 500,000 men; our quota, 627. We furnished (including 196 navy recruits) 998 men, at a cost of \$147,594.11; average cost, \$147.94½.

1864—December 19, call for 300,000 men. No quota was ever assigned to Lowell under this call. I was informed by the Provost Marshal that our quota, January 1, 1865, was eight men short of all requirements. We continued our enlistments until the surrender of Richmond. The number enlisted subsequent to the call in December was 132 men at a cost of \$17,139.55; average cost, \$129.08.

Of the volunteers for 100 days, Lowell furnished 252, at a cost of \$143.80—making the whole number standing to our credit, 4,736 men, and the whole cost of recruiting and bounties, \$254,074.87. In addition to this we have expended for uniforms, interest on State Aid paid, and other incidental expenses of the war, exclusive of the Ladd and Whitney monument, the sum of \$39,141.02—making a grand total of \$293,215.89. It should be stated that there were 450 men from our city who enlisted in the naval service, but in the apportionment which was made, only 196 were allowed to our credit. Had we received full credit for these men, our whole number furnished would have been 5,022.

Lowell Receives Souvenirs from the Front—Souvenirs of the war began to arrive at Lowell and to excite keen interest among all classes of the population. Many of these have been preserved.

The famous steam gun, a sort of prototype of the machine gun of to-day, which was captured in Maryland, near the Relay House by a detachment of the Massachusetts Sixth, reached the city on August 13, 1861. Especial curiosity regarding this piece had been excited, and a crowd gathered as it was taken from the train. Those who examined the mechanism saw a bulky construction weighing about two tons and resembling a snow plough. It was invented by Charles S. Dickinson, of Cleveland, Ohio, who had formerly taught dancing in Lowell. The capacities of the gun were thus set forth by the inventor: "Rendered ball proof, and protected by an iron cone, and mounted on a four-

wheeled carriage, it can be readily moved from place to place, or kept on march with army. It can be constructed to discharge missiles of any capacity from an ounce ball to a 25-pound shot, with a range and force equal to the most approved gun-powder projectiles, and with a discharge of from one hundred to five hundred balls per minute." Mechanics of the Spindle City who looked this piece over did not highly approve its action and wondered at the report that the Richmond government had appropriated \$5,000 to build another like it. As a curious relic of the contest it was turned over to the Middlesex Mechanics' Association.

Relics and mementos, none of them perhaps quite so exciting as the steam gun, continued to be sent home by officers and men at the front. Hardly a week passed but the newspapers recorded something that would be a valuable "document" in a war museum.

A secession flag from New Orleans was certainly one of the most exciting reminders of the war. All day long, on the Fourth of July, 1862, this banner flew from the pole on City Hall, but not in such a fashion as to suggest that Lowell had been captured by the secessionists, for directly over it was the larger emblem of the Union.

A letter from General Butler explained the circumstances of this gift to the people of Lowell:

Headquarters of the Gulf,
New Orleans, June 5, 1862.

Mr. Mayor:—I send enclosed to your order the flag of Fort Livingston, Louisiana. The fort is said to have surrendered to the navy, but I have the flag and I assure you that I did not borrow it. The truth is, the fort surrendered to a heroic Union girl, who has brought me the flag, which I send you in order that our people may see for the first, and, I hope, only instance, what kind of a rag secession and rebellion proposes instead of the glorious flag of our fathers. Please have it hoisted under the stars and stripes, on the City Hall, on the Fourth of July, and give one thought to your fellow-citizen whom duty calls to be far away from the city of his home.

I am very truly your friend,
BENJAMIN F. BUTLER.

When this thrilling letter was read by the mayor to the board of aldermen the following resolve was soon worded:

Ordered, That the mayor be requested to cause the secession flag this day received from Major-General Butler to be displayed on the staff of the city government building, under the stars and stripes, during the Fourth of July next. 2nd. That the flag be preserved as a trophy, and placed with the other collections relating to secession in the city library of the city.

The "rebel flag" which thus greeted celebrants on the National holiday in 1862 had dimensions of nine by sixteen feet. It was made

in New Orleans. It showed three bars, two of them red and one white, with thirteen stars in a blue field.

Much noise was created in Lowell, literally, by another reminder of the South which was received in February, 1862, by former Alderman W. G. Morse, from one of the soldiers in the Massachusetts Twenty-sixth. This gift was a young porker, of a sort familiar to visitors in southern cities, but a curiosity in the north. As described by a writer of the time, "it is a queer looking customer, weighs less than three pounds, and is covered with long black bristles or hair. It is probably but a few weeks old, but he can squeal equal to an old grunter. If that is a specimen of the fresh pork our soldiers get at Ship Island they are to be pitied. It is worse than 'Pennsylvania drag' or salt horse. The animal has been purchased at great expense by a lover of animals and will be raised to hoghood. The hide is said to make capital leather for belting." Further data regarding this visitor are not available.

Stories of atrocities were quite as rife in the Civil War as during the World War upon which the United States entered in April, 1917. From Virginia, whither he went in the summer of 1862, on a trip of inspection, Samuel P. Hadley, later Judge Hadley, of the Police Court, brought back to Lowell a good specimen of a "poison bullet." This ball had been given him by a member of the Thirty-third Regiment, who was certain that it was constructed to contain poison. It was said to be one of many fired at the battle of Manassas, from which Union soldiers were suffering with wounds swollen to enormous size. This bullet, of the familiar "Minie" pattern, was exhibited for a time in the window of former Mayor Sargeant's bookstore.

As the war dragged on there were periods in which little that was directly connected with military or naval events happened in Lowell, except the continual reception of dead bodies and wounded men. Every now and then occurred some public demonstration worthy of special recording in this narrative. For the rest the city lived on from month to month, with the fate of the armies at the front always in everybody's consciousness.

The Burial of Captain Edward Abbott—Announcement of the deaths of Lowell men, which was a portentous event in the first days of the war, soon became commonplace. Obituary notices of this kind were chronicled very frequently, for casualties were numerous among the five thousand or more of the city's sons who saw service.

One death, however, that more than ordinarily startled Lowell, was that of its first commissioned officer to fall, Captain Edward G. Abbott, who was slain while leading his men at the battle of Cedar Mountain. This son of Judge Josiah Abbott was a graduate of the Lowell High School and of the Harvard College class of 1860.

Although only just of age he had won the confidence and respect of military men. His letters to Lowell friends were eagerly read and sometimes published in the newspapers. Shortly before the fatal engagement in which he lost his life he had written: "We are just on the point of marching towards Culpepper, I believe. The health of the company and regiment is very good, which I attribute to good cooking. A New York regiment, just arrived here, have 300 men on the sick list; they don't understand camp life, nor do their officers, who are quite inexperienced, and so do not properly attend to the camp police. Here is a strong reason why men should enlist in old regiments, where the cooking is good, and the officers know their duty. I hope a dozen recruits will be saved for me out of Lowell's quota."

The request could not be granted to the officer who made it. In the midst of careful, attentive service of this kind, General Gordon's brigade was ordered by General Banks to resist the onslaught of Stonewall Jackson's force of 25,000 men in the valley of Cedar Run. The brigade, on the extreme right of Banks' line, was very severely punished, having 74 men killed, 191 wounded and 79 missing. In this severe fray Captain Abbott distinguished himself by his bravery. General Gordon, his brigade commander, said: "I saw when he fell. I was proud that I had done something to educate him to the profession he so much, so peculiarly, adorned."

After the battle Captain Abbott's body was recovered and sent to Boston. The family would have preferred that the burial should be in Mount Auburn Cemetery. So urgent were the requests, however, from Captain Abbott's Lowell friends that Judge and Mrs. Abbott acceded to a plan of interment in the Lowell Cemetery. A memorial service was held in Boston on August 18, which was attended by the Harvard class of 1860 in a body and by a delegation of city officers and many others from Lowell. Thence the casket was brought to the Middlesex station, Lowell, and in solemn procession carried to the final resting place, where Rev. Dr. Edson made a touching address.

Throughout 1862 Lowell residents read their papers with especial eagerness for news from the Department of the Gulf, where General Butler and his regiment were operating in Louisiana.

Lowell Boys at Ship Island—A great departure of Lowell troops was witnessed in the first weeks of the year. General Butler had previously obtained authority from the President to raise and equip six regiments, for which purpose he was assigned temporarily to the Department of New England. With the beginning of 1862, however, he was transferred to the Department of the Gulf, and was expected to make a record for effective operations on the long coast line between Key West and Brownsville

Those Lowell troops who were attached to this Gulf of Mexico division left the city on the 2nd of January. On the next day there was a great mustering on Boston Common, where, despite the intense cold, flags were presented to two newly enlisted regiments. In each case General Butler gave the colors, "styling them as the emblem of the unity of the republic and the 'hieroglyph' title of the indivisibility of the Nation." From the Common the troops proceeded to Long Wharf, where they embarked for the long journey south.

A little incident significant of the conditions under which some enlistments were made occurred at this embarkation. Two Lowell thieves, J. L. and J. H. Edds, had had their sentences commuted on condition that they go to the front. They deserted in Boston and, with the well-known lack of imagination of criminals, found their way back to Lowell, where they promptly fell into the hands of the police. Officers Rand and Plaisted rushed them back to the Hub and got them aboard the "Constitution" just as she was about to sail.

The trip south was made successfully, and on January 21 a batch of more than 150 letters from Lowell boys at Ship Island caused widespread rejoicing among relatives and friends.

An important contribution from the Spindle City to the encampment on Ship Island was a crew of expert mechanics, the best that the city could offer. The men chosen to serve their country in this capacity were: Captain, James M. Howe; clerk, James R. Hopkins; carpenters, Alphonzo Crosby, A. A. Lanikin, Ira Caverly, Elbridge Kimball, William H. Cargill, J. K. Hodgdon, Thomas L. Leighton; wheelwrights, Joshua Ames, John Varnum, N. C. Lock, Edson Upton, Charles Montgomery, E. B. Caldwell, L. H. Caldwell; blacksmiths, Joseph Tibbets, F. W. Champney, A. S. Straw; James Hughes, Charles W. Stinson; masons, Charles Marshall, H. K. Barnard, H. A. Searl, A. E. Patrick; shoemakers, Worthy Parker, Thomas Davis; tinmen, G. W. Barnard, A. D. Holt; mechanics and teamsters, L. B. Stevens, S. G. Stevens, W. A. Boy; tent-maker, H. C. Bailey.

Ship Island, at which many of those Lowell men saw their first service in the war, had been chosen by General Butler as a base of operations against New Orleans. The commanding officer in his book gives the following description of it: "Ship Island is an island of white sand thrown up by the winds and waves. It is between five and six miles long, and is about ten miles distant from the Mississippi coast. At the upper part of it there is some soil on which is a growth of pine which serves at once for the fuel and timber required. This eastern end of the island rises to some considerable height above the waters of the Gulf. The western end is more flat and rises only a little above the sea, in places less than two feet, and in case of any considerable sea, the waves wash over it. At the time of the arrival

of my troops there was not a house on the island. We brought some section houses to be put up for hospital purposes and to cover stores and supplies, but we relied for shelter upon our tents." Very entertaining descriptions of life on the island were written by Mrs. Butler. These facts first saw print in the volumes of Butler correspondence edited by Jessie Ames Marshall.

It is for military historians to adjudicate the standing dispute as the relative share taken by General Butler and his Massachusetts troops and Commodore Porter and the naval forces in the campaign which resulted in the capture of New Orleans on April 25, 1862. Possibly as the political and social animosities of the late nineteenth century are forgotten a different estimate of this campaign may be given from that which the Harvard College school of historians has made conventional. General Butler's side, certainly, of an old controversy is vigorously expressed in his autobiography.

The newspapers of the first days of May, 1862, brought the announcement of the capture of New Orleans by Commodore Farragut and of General Butler's entrance into the city. It was soon afterward reported that the community was governed with an iron hand by the democratic attorney from Lowell; that the poor were provided with food and a reign of law and order introduced to which the people of the Crescent City had long been strangers. Public approval in the general's home town undoubtedly greeted the story of his issuing the famous "General Order No. 28," threatening with the punishment of the calaboose those high-bred women who persisted in hindering the execution of good government and respect for the National emblem. Many letters from officers and men regarding these occurrences were printed locally. Of such sort, expressing an opinion undoubtedly favorable to the general's management of the situation in the Louisiana metropolis, was a letter in which Second Lieutenant David Field, writing under date of May 30, 1862, said: "Gen. Butler is deservedly popular here. The citizens speak of him in the highest terms. He has grappled with all the great questions at issue with them, and has shown the qualities of a commanding general, the statesman, the lawyer and the civilian, and the man. His keen legal talent and discernment of men and character have enabled him to read things in this city which most generals would have passed by."

What Butler Told Lowell About New Orleans—An accounting of his stewardship at New Orleans was given by General Butler, in presence of his fellow-citizen townsmen, on January 13, 1863. The doughty Lowellian, on December 15 preceding, had been superseded in his command by General Banks and a few days later had started north, issuing before he left an address to the people of New Orleans in which he earnestly entreated them to return "not with lip service, but with

the heart," to their true allegiance. In New York he was extensively interviewed. When at last he arrived in Lowell he found that a reception had been arranged in his honor in Huntington Hall, Mayor Hosford presiding. As orator of the occasion, Hon. John A. Goodwin delivered an address of welcome to which the general replied feelingly, stating that it was due to the loyalty and efficiency of Lowell men that he had been able to accomplish what he had. He told his listeners that his experiences in New Orleans had not made him less but rather more of a Democrat; that he had found fourteen thousand of the laboring people of the city quite ready to take the oath of allegiance to the United States, but that the property owners were, as a class, bitter rebels. "The object of this rebellion" he said, "is to enable the landed aristocracy to govern the country. The poor people in the South are not consulted in their government. They fight because they are compelled to fight; they will not volunteer as our men have done, because they feel no interest in the controversy."

After the addresses an informal reception was held at which thousands of men and women pressed forward to grasp the general's hand.

The papers for some months thereafter carried frequent items about General Butler's opinion on one subject or another, but nothing regarding further military or administrative exploits, for during the major part of 1863 he held no command. It was not until November that he was for a second time placed in command of the Department of Virginia and North Carolina with results which will appear.

The hostile attitude of many leading English public men and newspapers toward the United States in its struggle for preserving National integrity caused much indignation in Lowell. In April, 1862, an indication of this attitude of hurt surprise was shown in a decision of the Middlesex Mechanics' Association to cancel their subscription to the "London Times." The assigned reason was this: "Although it may be desired and perhaps profitable for us to know what intelligent foreigners think of our people and our institutions, and, while we would not betray an undue or morbid sensitiveness under the lash of criticism, we do think that the subscription price of the London Times is too much to pay for the privilege of being abused in its columns."

How the City Supported the Administration—The election of 1862 aroused Lowell as it did most Northern communities. The problem was whether the electorate would or would not sustain the Lincoln administration. The Republicans were naturally very active. On October 23 Huntington Hall was filled with one of the most enthusiastic political meetings in the city's history. Senator Charles Sumner had been secured as the principal speaker by a committee whose officers were as follows: President, Hon. A. P. Bonney; vice-presidents, Hon. John Nesmith, W. S. Southworth, John A. Buttrick, E. F. Wat-

son, Horace J. Adams, F. P. Appleton, L. G. Howe, Rufus Rogers, William G. Morse, Alfred Gilman, James C. Ayer, William Nichols, A. L. Brooks, T. L. P. Lamson, Francis H. Nourse, Dr. Harlin Pillsbury, John L. Cheney, Dana B. Gove; secretaries, Z. E. Stone, George F. Morey, S. P. Hadley.

Senator Sumner spoke with his accustomed eloquence for two hours, devoting about half of his address to an elaborate defence of the Republican conduct of the government during the great crisis.

On October 29 came another great rally, with Henry Wilson as the orator.

At the succeeding election, on November 3, Lowell gave substantial Republican majorities to all candidates. Governor Andrew's vote was 1,977, against 1,427 for the Democratic candidate, Charles Devens, Jr. To Congress the district elected Hon. George S. Boutwell, of Groton.

The First of the Great Sanitary Fairs—In Lowell, early in 1863, originated in conception and practical form the first of the many "sanitary fairs," which during the middle and later years of the war were held in several of the country's largest cities. This extension of the work of the Soldiers' Aid Association was undoubtedly one of the finest achievements of the civilian population.

A participant's account of the beginning of this splendid undertaking is as follows: "On the evening of the 24th of January, 1863, a score of ladies assembled at the house of a gentleman in Lowell, at the request of his daughters, to consider the expediency of holding a fair in aid of the Sanitary Commission. At first it was only intended to make this a neighborhood affair; but as they talked, the cause inspired them with deeper interest and stronger faith; and before they separated, they had not only decided to ask the coöperation of every religious society in the city, Protestant and Catholic, but a notice was written for the city papers requesting all persons interested to meet at a specified place. A large number of ladies and gentlemen responded to the call. A plan was drawn up, and an executive committee, composed of nine gentlemen and six ladies, chosen. Committees, with a chairman for each, were appointed for each department. The originators expressed their expectation that Lowell will give still another proof of that patriotism and liberality which have hitherto entitled it to a prominent place in the history of the times. In four weeks from the day when the first meeting was called, without a dollar in hand or an article prepared, the first Sanitary Fair was opened—a fair which, for harmony of action, beauty of decorations, system and order of arrangements, and perfection of financial arrangements, has never been excelled, if equaled."

The executive committee in charge of this enterprise was: Chair-

man, Mayor Hocum Hosford ; secretary, W. F. Salmon ; E. P. Patch, George Ripley, H. H. Wilder, Isaac Place, Abiel Rolfe, E. F. Sherman, Jacob Rogers, Mrs. James B. Francis, Mrs. John Nesmith, Mrs. George Hedrick, Mrs. C. P. Talbot, Miss B. Robbins, Miss M. Hinkley. The heads of special committees were as follows : Finance, S. D. Sargeant ; music, Charles Merrill ; tables, William P. Brazier ; refreshments, O. E. Cushing ; decorations, J. G. Peabody ; flowers, Mrs. John Nesmith ; clothing, H. P. Perkins ; police, N. F. Crafts ; printing, S. W. Huse.

The three days' bazaar and fete in Huntington Hall was markedly successful in spite of a severe rainstorm that continued during most of the time. There were amusing as well as picturesque incidents. Some complaints were heard to the effect that young ladies in charge of the tables did not give change or bills tendered in payment for articles. One young man asked a girl who seemed loath to give him specie in change to hand him some small articles in its lieu which would always remind him of her. She promptly drew a pickle from a jar and gave it to him.

The net receipts from the Sanitary Fair were \$4,884.99. When this amount was tendered to the National Sanitary Commission it drew from Dr. Bellows, the well-known Unitarian divine of New York, such a letter of appreciation and of commendation of the Lowell spirit as deserves to reappear in full in any record of the city's achievements.

Mr. Salmon had written to Frederick Law Olmsted, then general secretary of the Sanitary Commission, stating the amount that had been raised and the feeling of the local committee that a part of the fund might properly be disbursed for articles made in Lowell, for which advantageous terms could be secured and which would keep the mills running for the benefit of the working class. From New York a few days later came this enthusiastic letter :

U. S. Sanitary Commission,
New York Agency, 823 Broadway,
New York, March 21, 1863.

Wm. F. Salmon, Esq., Secretary of Executive Committee of Ladies of Lowell—

Sir:—Your favor of the 14th inst. has just been referred to us by the General Secretary of the United States Sanitary Commission.

The zeal and liberality of your community have been conspicuous in every hour of the war. The Sanitary Commission has met the Lowell soldiers in many fields ; and among its very earliest experiences recalls a delightful meeting with your mayor and other citizens at Fortress Monroe, where a Lowell company was admitted into the line with regulars, and proved itself their peer in drill and discipline. Even your repeated contributions to our stock of supplies had not led us to anticipate such a splendid addition as you now offer ! You would have been up to the average if you had stopped where you were. You

will make it very difficult for any community (this side the Rocky Mountains) to keep pace with you, now that you pour four thousand eight hundred and fifty dollars into our treasury! I think we must declare you the banner town in New England. It is perhaps due to the fact that you have a larger proportion of women than of men in your population; and needles and prayers are the weapons with which women carry on the war, after they have sent all the men they can spare (and more) to the front, with guns, and freemen's souls behind them.

Your suggestion about the mode of using the fund you have raised is perfectly acceptable to us. We acquiesce in your view, and request you to transmit half of the amount in a check or draft to our treasurer N. T. Strong, Esq., No. 62 Wall street, New York, and the other half in supplies to our Auxiliary, No. 22 Summer street, Boston. As to the nature of the supplies we refer you to that Auxiliary, on whom we draw for certain articles which we must look to communities like yours in her vicinity to supply her depot with. Ask her what she needs most to meet our calls upon her, and govern yourselves accordingly. System is so necessary in our work that you'll appreciate the reasons of this apparent indirection.

With lively gratitude to the ladies and citizens of Lowell, I am, in behalf of the Sanitary Commission, and still more of our sick and wounded soldiers,

Your obliged friend and servant,

HENRY W. BELLOWS, President.

The Chicago Sanitary Fair closely followed Lowell's. The Boston Fair came in December, 1863, and netted receipts of \$153,568.97. Several other communities adopted this Lowell-born plan for assisting the National Sanitary Commission.

The old Sixth Regiment, now a veteran organization, returned to Lowell upon the expiration of its enlistment on May 30, 1863. As was natural considering that it was the pioneer volunteer regiment a reception was tendered the officers and men in Huntington Hall. Mayor Hosford, in his address, congratulated the regiment on its achievements. Colonel Albert S. Follansbee, who had been with the regiment since the affair in Baltimore, made appropriate reply. The Sixth's service was not at an end, however, for it again went out for one hundred days.

During the protracted Virginia campaign, which was finally brought to a close by Grant's dogged determination, casualty lists were eagerly scanned in Lowell and many such deaths were noted as have been referred to in the paragraphs on the records of the separate regiments. Boys from the Merrimack valley did a big bit toward winning Gettysburg, toward preventing actual defeat at the Wilderness.

What Lowell Learned About Fort Fisher—His fellow-citizens were naturally much interested in the first and disastrous assault upon Fort Fisher because of the prominence in it of General Butler and his son-in-law, General Adelbert Ames. Many Lowell friends of the

militant lawyer felt, whether rightly or wrongly, that certain leading men of the navy were not altogether ingenuous in foisting upon this one army officer the entire blame for the occurrences in front of one of the Confederacy's mightiest strongholds.

What readers of the Lowell and Boston newspapers gathered from reports was that on December 13, 1864, General Butler, as part of the strategy planned by Generals Grant and Sherman for ending the war, sailed with seven thousand troops of his department from Fortress Monroe to coöperate with Admiral Porter in an effort to take Fort Fisher, near Wilmington, North Carolina. It was General Butler's suggestion that a steamer loaded with upwards of two hundred barrels of gun powder be driven in as close as possible to the walls of the fort and exploded, with expectation that the walls would be shattered and the garrison paralyzed by the shock. The explosion occurred, but perhaps because the orders were not executed skillfully, inflicted little if any damage upon the Confederates. An attack in force had been agreed upon for the following day, but as the sea ran high the troops were not all landed and those that reached shore gained only a slight success over the opposing outposts. Thereupon General Butler and General Weitzel, his chief engineer, deciding that the fort could not be carried by assault, ordered all the troops who were on shore to reembark. This fiasco, if such it was, ended General Butler's military career. A second attack on Fort Fisher, three weeks later, carried the place. That, however, the Lowell general's caution was justified by the circumstances of the situation at the time of the first attack has been strenuously maintained by his friends and supporters. Colonel William Lamb, furthermore, who defended the fort, afterwards asserted in an article on "The Defence of Fort Fisher," that Admiral Porter was quite as much to blame as General Butler for the first failure. As for the retirement General Weitzel, as a qualified engineering expert, took, before a Congressional committee on the conduct of the war, the blame of advising General Butler, saying:

In the two instances when the enemy assaulted my position they were repulsed with heavy loss. After that experience, with the information I had obtained from reading and study—for before this war I was an instructor at the Military Academy for three years under Professor Mahan on these very subjects—remembering all the remarks of the Lieutenant-General commanding, that it was his intention I should command that expedition because another officer selected by the War Department had once shown timidity, and in face of the fact that I had been appointed Major-General only twenty days before, and needed confirmation; notwithstanding all this I went back to General Butler and told him I considered it would be murder to order an attack on that work with that force. I understood Colonel Comstock to agree with me perfectly, although I did not ask him, and General Butler has since said that he did.

Despite the success which befell the second attack on Fort Fisher when an immense bombarding flotilla coöperated with a force of some 2,000 sailors and marines and an additional command of 2,400 troops, the committee on the conduct of the war, with Hon. Ben Wade as chairman, reached a conclusion that exonerated General Butler from the charges of timidity and defective judgment. Their conclusion was: "In conclusion your Committee would say, from all the testimony before them, that the determination of General Butler not to assault the fort seems to have been fully justified by all the facts and circumstances then known or afterwards ascertained."

A full report on the Fort Fisher happenings was rendered to his fellow-citizens by General Butler at a reception which was arranged in his honor on the 30th of January, 1865. The general was loudly applauded in such passages of his address as when he asked whether he "ought to be hounded down and a price almost set upon my head, like a wolf, because I did not order an assault which two of the best engineer officers in the United States service advised me not to make and in reference to which one of them said to me (I use his very expression), 'If you order it, General, it will be murder'."

Inception of the Ladd and Whitney Monument—The earliest public announcement of a plan to honor the last resting place of the first victims of the war was made in Mayor Hosford's inaugural address of January 4, 1863. In the course of this he asked: "In the border of our cemetery rest the revered remains of young Ladd and Whitney, the first martyrs to our cause, unmarked the spot, unobserved by the passer-by. Ought we not to provide a 'Heroes' Field' where others may sleep, and over their sacred remains raise heavenward the crystal granite or the polished marble shaft?"

Influenced presumably by this suggestion, Representative J. N. Marshall of Lowell, on April 17th following, introduced a resolution appropriating from the State Treasury the sum of \$2,000 toward a suitable monument for Messrs. Ladd and Whitney, on condition that the city of Lowell appropriate a similar amount. This proposal was subsequently accepted by the city government and plans made for a memorial.

Progress on the Ladd and Whitney monument was noted from time to time by adults and small boys during the winter of 1864-1865. The plans had been drawn by Woodcock & Meacham, Boston. The work of erecting the shaft and laying out the approaches in Lowell was commissioned to Runels, Clough & Company. The memorial was to take the form of a simple granite shaft twenty-seven and one-half feet high. On the plinth of one side were the words:

Addison O. Whitney, born in Waldo, Me., October 30th, 1839, and Luther C. Ladd, born in Alexandria, N. H., Dec. 22d, 1843. Marched

from Lowell in the 6th M. V. M. to the defence of the National Capital, and fell mortally wounded, in the attack on their regiment, while passing through Baltimore, April 19, 1861.

The Commonwealth of Massachusetts and the City of Lowell dedicate this monument to their memory, June 17, 1865.

On the reverse plinth is a quotation from Milton's "Samson Agonistes:"

Nothing is here for tears, nothing to wail
Or knock the breast; no weakness, no contempt,
Dispraise or blame, nothing but well and fair
And which may quiet us in a death so noble.

It was originally proposed to dedicate this monument on the 19th of April, but unexpected delays prevented. Even if everything had been in readiness the National calamity of April 14 would have changed all plans.

Victory and the Assassination Thrill the City—Excitement began to run high in the spring of 1865, as it was realized that the end of the war was in sight. On April 6 a mass meeting was called in Huntington Hall to celebrate the recent Union successes on the field. Mayor Peabody presided. Fervently patriotic addresses were made by Rev. Mr. Backus, Joseph C. Kimball, former Mayor Sargeant, and Rev. J. O. Peck. The exercises closed with the singing of "John Brown's Body" by the Glee Club and of "Old Hundred" by the Glee Club and the entire audience.

Finally, on the afternoon of April 10, readers of the "Lowell Citizen" beheld with delighted eyes, under a representation of the Stars and Stripes, the headlines: "God be Praised! The Morning Cometh. Closing Victory of the War. Surrender of Lee and his Army." By that token every man, woman and child knew that, though still technically existent, the Confederacy was really dead; that it was only a question of a few days before the remnants of the rebel armies must follow the example of their former commander-in-chief. An immediate invitation was issued to all citizens to attend another mass meeting in Huntington Hall. Again the mayor presented a list of local speakers, Dr. Elisha Huntington, John Wright, James Dean and several of the resident clergy. On that evening and for two days after, the city rang with rejoicing.

Black lines between columns in the newspapers of April 15, 1865, signified a National tragedy. The news of President Lincoln's assassination had reached Lowell. The story which came from Washington over the wires was essentially that with which every school child is now familiar—of the president's attending the theatre to seek a little recreation in a time of especially anxious care; of the sudden apparition of the assassin with his pistol shot and his melodramatic shout of "Sic semper tyrannis." Thereupon blackness fell upon the land.

The details of the dreadful event at Washington belong, of course, rather to general than to local history.

An incident of the forenoon in which the news was received in Lowell is worth citing as illustrating the tense and overwrought state of public feeling. In the presence of Daniel S. Greenleaf, a loyal citizen, one Otis Wright, a merchant who had lately come to the city from New Hampshire, a State then regarded as much of a hotbed of "copperheadism," ventured to express himself as well satisfied with the assailant's work, adding "words of contempt for the President too brutal for repetition among civilized men." Mr. Greenleaf in indignation reported these utterances in the street and within a short time a crowd of several hundred angry people gathered in front of Mr. Wright's place of business in the Museum building and demanded his appearance. The man came forward bearing an American flag and denying that he had said anything disloyal.

Mr. Greenleaf, however, promptly addressed the crowd, repeating the New Hampshire man's exact words as he remembered them and challenging him either to deny or correct them. Then the "copperhead" hung his head and became too confused to answer. The crowd by this time was in ugly mood and it might have fared badly with the man Wright, had not Mayor Peabody arrived on the scene and begged his fellow-citizens to indulge in no rioting, as he understood that the offender had already made arrangements to leave the city. Soon after this the assailant of the martyred President's character left Lowell for good and all, as it is believed.

Solemn services in all the churches on Sunday, the 16th, attested the awed solemnity that had befallen the city since the news of the assassination at Washington. On Thursday, the 20th, appropriate memorial exercises were held in Huntington Hall, with Congressman (afterwards Governor) George S. Boutwell as orator of the occasion.

The Dedication of the Monument—As Lowell slowly recovered from the feeling of stunned grief that Walt Whitman so nobly expressed in his "Captain, My Captain," preparations were continued for the dedication which should memorialize the beginning and signalize the end of the long conflict. It was decided to unveil the Ladd and Whitney monument on June 17.

Just prior to the dedication two portraits of the fallen heroes were exhibited at the store of H. M. Ordway, in Merrimack street. These were the work of Alfred Ordway, of Boston, one of the founders of the Boston Art Club. They were designed, it was announced, to be part of the collection of the "National Gallery of Heroes," for which ambitious plans were then under consideration. Credit for commissioning Mr. Ordway to do these portraits appears to have rested with Messrs.

Nesmith and Talbot, of Lowell. The pictures were hung in Huntington Hall during the dedicatory exercises.

Finally, on the anniversary of Bunker Hill battle came the most spectacular celebration Lowell had yet had.

In addition to the turn-out of old and young from every street in the city, a crowd estimated at about twenty thousand poured in from the surrounding cities and towns.

The long procession through Lowell streets was headed by the Spalding Light Cavalry, closely followed by nine companies of the old Sixth and three companies of the Thirty-third, the latter under the tattered colors which they had lately borne "from Atlanta to the sea." Then came the sheriff of Middlesex county, the whole city government of Lowell, various Masonic bodies, aged veterans of 1812 and 1845 in carriages; the Independent Order of Cadets, of Boston; officers of the staff of the Governor of Maryland; Major General Butler; the Executive Council of the State of Massachusetts; the chaplain and toast-master; the mayor and aldermen of Boston; representatives of the Great and General Court of Massachusetts; representatives of the Massachusetts Judiciary; representatives of the governments of Worcester and Lawrence, and the selectmen of Groton, Acton and Stoneham; former mayors of Lowell; the Lowell Fire Department; Independent Order of Odd Fellows; Independent Irish Benevolent Society; Young Men's Catholic Library Association; American Protestant Association; Lowell Circle of Fenian Brotherhood; Franklin Zouaves.

An incident of the parade was the massing of young women, arrayed in white and waving the flags of the loyal States, in front of the Appleton street house of George F. Willey, music master. These girls sang the national airs which were taken up by the veterans as they passed. Residents of the Chapel Hill district had prepared vast quantities of lemonade, which was tendered to the thirsty paraders as there were pauses in the line of march.

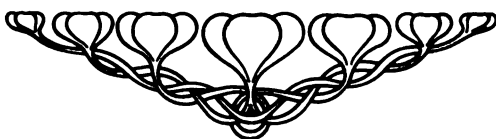
At one thirty the head of the procession arrived at Monument Square. The subsequent exercises were divided into two parts, fraternal and civic. The square at first was made the scene of a Masonic Grand Lodge, opened by Most Worthy Grand Master William Parkman, of Boston, who made an eloquent address. The situation was then turned over to the civic authorities. After a prayer by the Rev. Amos Blanchard, Mayor Peabody introduced the orator of the occasion, John A. Andrew, Governor of Massachusetts.

The ringing periods of the Governor's elaborate *resumé* of Massachusetts's part in the Civil War were in the best manner of the oratory of the period. It was a supreme effort, worthy of the day on which Lowell and the Bay State were as conspicuous in the eyes of the nation as at any time in the nineteenth century. The speech was printed

verbatim in a ten-column story of the events of the celebration in the "Citizen," an unusual journalistic feat for the time. As a reminder of its style and substance the peroration, at least, should be given :

Let this monument, raised to preserve the names of Ladd and Whitney,—the two young artizans of Lowell who fell among the first martyrs of the great rebellion,—let this monument now dedicated to their memory stand for a thousand generations! It is another shaft added to the monumental columns of Middlesex. Henceforth shall the inhabitants of Lowell guard for Massachusetts, for patriotism and liberty, this sacred trust, as they of Acton, of Lexington, of Concord, protect the votive stones which commemorate the men of April, '75.

Let it stand as long as the Merrimack runs from the mountains to the sea ; while this busy stream of human life sweeps on by the banks of the river bearing to eternity its freight of destiny and hope. It shall stand here, a mute, expressive witness of the beauty and the dignity of youth and manly prime consecrated in unselfish obedience to Duty. It shall testify that gratitude will remember, and praise wait on the humblest, who, by the intrinsic greatness of their souls, or the worth of their offerings, have risen to the sublime peerage of Virtue.





PAWTUCKET FALLS AND NORTHERN CANAL.
Showing Canal Walk for use of Public.

CHAPTER XI.

Lowell, from Civil War to Chicago Exposition.

Industrially and socially considered the period from the end of the War of the Rebellion to about the time of the Chicago Exposition and the panic of 1893 forms rather a distinct unit in the history of the city of Lowell. The happenings of these three decades are in marked contrast to the stirring scenes of the years 1861-65. While progress was steady and continual in many directions this was not a time of sensational developments, of startling achievements or even, perhaps, of so much display of enterprise and initiative as had characterized the first years of the manufacturing community, or has since 1893 marked the conduct of affairs in the city.

Pessimism, indeed, concerning the future of Lowell was more rife in the seventies and eighties than it has been since the successful establishment of the Lowell textile school and the continual broadening of the industrial life of the neighborhood by intensive development and specialization among the established manufactures and by further diversification of the local businesses. Reasons for alarm were not wanting; these were easily magnified by those who lacked vision to sense the corrections of evil conditions which were already in preparation. Many of the gravest problems of the twentieth century city first became acute in the last decades of the nineteenth century: deterioration of originally inadequate housing facilities for the working class; indifference to city planning for the future; neglect of the welfare of newly arrived immigrants; increasing tolerance of the evils of alcoholism and sex disease; a spread of coarsening influences in popular amusements and recreations; a new tendency toward vulgarity and ostentation among some of the well-to-do.

Exaggeration of these evils was sometimes practised by orators and writers who felt that the experiment of the high-minded founders of a model manufacturing community was coming to grief; that Lowell was visibly approaching some such ruin as Kirk Boott had once predicted. The well-ordered town of 1835 had become a city with serious problems by 1885. The compensating features were frequently ignored, for it was not so apparent, as it became thirty years later, that cosmopolitan Lowell has within itself all the elements needed for its own regeneration.

A marked change in the racial complexion of the city, and especially of the operative class, was unquestionably the most striking communal development of the *post-bellum* years. It was likewise one

which frequently caused gloomy, and, as it has turned out, needless forebodings.

In 1865 the mills at Lowell were still filled with young people from New England farms, even though this source of labor supply no longer yielded quite so many new recruits as in the first days of the manufacturing community. Practically the only "foreigners" were those using the English language and practising arts of living generally similar to those of the native-born population: the English, Irish and Scots, with a few people from the maritime Canadian provinces. By 1890, on the contrary, most of the native "Yankees" still left in the factories were elderly persons, survivors of former conditions; practically all the young men and women were aliens by birth or parentage, and many of these spoke languages which sounded to the man in the street like jargon. The operative population in the nineteenth century was not so mixed and polyglot as it has since become, but it was already in visible process of diversification; it included French, Germans, Swedes, Russians and a few of the Greeks, Syrians and Armenians, who now have large colonies.

This tendency toward racial complexity in the laboring population was not, of course, peculiar to any one New England textile center. The national figures of the nativity of cotton mill employees during three succeeding censuses, tell statistically and quite accurately the story of what was happening in Lowell, as may be seen from the following table:

Born in U. S.	Percentages.					
	1870	1880	1890	1870	1880	1890
United States	71,547	94,010	90,494	64.1	55.6	44.7
British America	7,613	36,385	40,690	6.9	21.4	25.5
Ireland	18,713	19,732	16,396	6.8	11.6	9.5
Great Britain	16,805	16,237	17,131	10.6	9.6	9.9
Germany,	11,214	1,988	3,763	1.1	1.2	2.2
All others	664	1,419	3,587	0.5	0.8	2.1

In exposition of these figures Copeland says, in his valuable book on the cotton manufacture: "In 1870 the Irish predominated among the foreign-born employees in our cotton mills, and the number has remained about the same, while the proportion has declined. The number of English and Scotch, likewise, has not manifested much change; the outflow and inflow have balanced. The Irish and particularly the British operatives, however, have moved upward in the scale of employment within the mills. Nearly all of the English are mule spinners, weavers, slasher tenders or overseers."

The Coming of the French-Canadians—As regards Lowell the overshadowing racial development of the years in question was due to the coming of the French-Canadians. Within one generation descendants of Norman and Breton peasants became so numerous as to give a tone to whole sections of the town.

The appearance of French-speaking people in Lowell began much earlier than has generally been stated. While it is true that the great exodus from Canadian farms to New England factories did not start until after the Civil War, a considerable number of French families were settled here prior to 1860.

//The first comers, it is understood, were not Canadians by birth, for they were of the New York State French villages situated in the Adirondack region. From this district a few French people found their way to Pittsfield and the Connecticut valley cities and thence to Lowell. The first native American of French tongue, so far as known, to settle in the city was Alaric Mercier, who came in 1845 and who in 1917 was still living. Several others followed in 1848, among them Louis Bergeron, Paul Lesieur, Edouard Courchesne, Joseph Dufresne, H. Dozois, Pierre and Luc Viau, St. Onge Laurence, M. Gobeil, Narcisse Remy. Some of these men boarded in a house off Middlesex street, in the rear of the present Richardson's Hotel.//Several of them were wood-workers. One was a blacksmith. From 1852 onward their number increased, and during the war as many as 400 enlistments of French Americans were noted. After the war the immigration from French-Canada increased rapidly.

Arrived in Lowell the French-Canadians brought with them the characteristic institutions of their Quebec villages. Their priesthood was their own; they did not join in worship with the Irish Roman Catholics. In 1868 was organized a branch of the St. Jean Baptiste Society, which had previously been started in Quebec in 1834 and which was already widespread throughout French-speaking Canada. This society in 1872 had a great celebration of the feast of St. John the Baptiste. The fete was renewed two years later. By 1877 the society had a Lowell membership of nearly 600. Numerous other French societies, lay and religious, were started at later dates.

Little Canada, which became the residential quarter of at first a majority of the Lowell French, was an open field prior to the Civil War, situated between the western end of the Lawrence corporation and the Great Bunt in the Merrimack. The location was convenient enough for a colony of mill operatives, to whom carfare would have been a prohibitive consideration. A plan of the Locks and Canals Company to lease house lots in this tract proved to be very profitable to the company. It was not, however, conducive to substantial building. The landlord's one object, only too often, was to realize large returns on an investment which he knew might be impaired by refusal at the end of the stipulated sixteen years to renew the lease.

The newcomers, therefore, were housed for the most part in flimsy structures. ranging from renovated horse sheds up to a large wooden "block" containing thirty-two tenements. Some promoters are re-

ported to have realized immense profits from their ventures in this district. About 1881, according to a credible account, a two and one-half story house on Merrimack street, very decrepit, was sold at auction for ten dollars, the seller who purposed rebuilding on his land, supposing that the old structure would be turned into kindling wood. The new owner, however, had the timbers moved over into Little Canada, spent about \$400 on patching them up for occupancy and obtained good paying tenants who gave \$480 a year for the quarters. As the land rental was only \$40 a year the landlord more than covered the total investment in a year and thereafter had an income exceeding one hundred per cent. on his money.

The fire risks were such, and sanitary conditions so unsatisfactory, that about 1885 there was more or less public discussion of the advisability of condemning the whole quarter and requiring the population to find other homes. Nothing was done collectively, however. The French people themselves, to a certain extent, began to solve the problem by moving over into a more substantially built section along Moody and Merrimack streets.

Increasing Cosmopolitanism of the City—The fortuitous settlement of other racial colonies in New England manufacturing towns has been a most interesting phenomenon since about 1880. Lowell began early to have its share, some conservatives maintained more than its share, of the polyglot populations that were seeking opportunity for a livelihood in the New World.

The Southern Slavs, who are now so numerous, must have been a mere handful about 1883, when a family of Greek fruit vendors operated a stand in City Hall avenue. Even in 1892 lower Market street still had more saloons than coffee houses. The Germans and Belgians, who in these years were flocking to America, rarely came to Lowell. The same thing is true of the Finns, who were beginning to furnish Fitchburg manufacturers with their most reliable help. The Swedes, while more inclined to settle in Worcester, made up a small but increasing element in Lowell, and there were a few Poles. Toward the end of the designated era, marked expansion of the Jewish colony added to the cosmopolitanism of Lowell. A few families of German Hebrews had settled in the city before 1880 and had become an integral part of its commercial life. About 1890 the Russian and Polish Jews, many thousands of whom were coming into the country of New York, began to find their way to the Merrimack valley. Apparently there was more or less direction of their migration. In August, 1891, the Lowell mill agents received letters from the United Hebrew Charities of New York, asking if they could offer work to Russian Jews, driven from their own country by persecution. "There are many skilled mechanics among their number," the communication stated.

"as well as families who have some experience and are well fitted to become operatives in mills and factories." This proposal, coming at a time when labor was not particularly well employed, created much antagonism in Lowell as in other New England textile centres. "In the present condition of labor in Lowell," said the "Times," "the shipping of these Hebrew paupers here would mean that some hundreds of people already settled here and paying taxes would be out of employment." Reports were spread that the Jews had brought much typhus fever from Russia. In Fall River the labor unions made strenuous objections to their employment in the mills. In an effort to counteract the prejudice that had been aroused in Lowell Agent Joseph S. Ludlam, of the Merrimack company, invited a newspaper man to visit the mills with him and see such Jews as were already at work. The reporter was evidently impressed. He wrote that "these women are dark with lovely eyes," and he readily accepted Mr. Ludlam's testimony that they were among the most industrious, thrifty and self-respecting operatives in the company's employ. Despite opposition, they continued to come, though never in such numbers as to rank with the French-Canadians or Greeks as candidates for citizenship.

One effect of the incoming of these immigrants which was gratifying to local pride was, of course, to maintain the city's numerical growth. Lowell in 1870 was a small city of 40,000 inhabitants; in 1890 it had nearly 80,000 people, and was plainly destined soon to reach the 100,000 class.

That racial diversification should be accompanied by new social cleavages was inevitable. These did not add to the democracy of the community, and they had one effect whose value may be variously interpreted. These cleavages were so marked that they beyond pre-adventure hindered the growth of economic class consciousness, which, in an industrial city of fairly uniform population, will invariably, as a natural and proper phase of social evolution, arise. Solidarity of the workers was held back in Lowell by the fact that native Americans and Irish often hesitated to fraternize with French-Canadians, Greeks and Hebrews. This lack of cohesion might conventionally be interpreted as advantageous to Lowell manufacturers. Yet throughout the eighties and nineties was witnessed the phenomenon of the rise of Fall River and New Bedford to leadership in the textile industry, so that by 1893 Lowell, the pioneer large factory city of America, had become distinctly a secondary factor in the cotton industry. For Fall River's rapid rise, the advantage of tide-water transportation has been generally alleged. It is significant, nevertheless, as a possible supplementary factor, that owing to a larger percentage of English-born and English-speaking operatives, the labor union movement has been much more vigorous in "the City of the Dinner Pail" and at New Bedford than it

ever has been in Lowell; and the query rises, if perhaps the kind of working people who are capable of getting together and asserting themselves are not in the long run a great asset to the community, the assurance of its further progress. Freedom from labor disturbances is not necessarily a sign of commercial health; it may be a mark of partial stagnation.

Be that as it may, Lowell took no such leading place in the labor union movement of the *post-bellum* years as from its historic position in the manufacturing world might have been expected. The Mule Spinners' Union of Fall River, which had been organized in 1858, continued to be the model of its kind in the textile trades. In Lowell the increased prominence of ring spinning, which requires less of skilled help, may have been a factor in checking organization.

Beginnings of Trade Unionism—Perhaps the most interesting example, indeed, of working-class self-assertion in Lowell in the time under review, came at its very beginning. In the autumn of 1865 a decided effort was made by working men to influence the city's representation in the Legislature. The undertaking, as it turned out, was only partially successful, even though the nominations made by a workingmen's committee were taken over bodily by the Democratic party. The incident at least was not without economic significance and the resolutions which were adopted on October 25, 1865, at the first meeting of the Lowell workingmen's committee, should be a good document for some future historian of American labor relations. They are in direct evidence of a considerable growth of class consciousness, as thus expressed:

Whereas, we heartily sympathize in the movement now being agitated throughout the country in favor of a reduction in the hours of labor, and we believe that the future stability of our prosperity of our republican institutions in America depend on the intelligence and education of the masses—we therefore, in behalf of the workingmen of Lowell, set forth and adopt the following resolutions:

Resolved, That the institutions of civil liberty given us by our fathers, and preserved from traitorous assaults by our gallant soldiers and sailors, can only be perpetuated by a thinking ballot box.

Resolved, That the interests of our manufacturing industry and all our mechanic arts flourish or decline according as the laborers employed in them are educated or ignorant, moral or vicious, and that the standard of education and morality among laboring people is higher or lower according as the opportunities afforded them for intellectual and moral culture.

Resolved, That to secure any improvement in education and morality among the laboring classes it is indispensable that there be a reduction in the hours of labor.

Resolved, That we disapprove and discountenance "strikes" as tending to lead to difficulties between the employer and employed and retard the interests of both.

Resolved, That having been silent during the war, now brought to a glorious termination, when capitalists made their fortunes, though laborers still struggled for their subsistence, we now claim the aid of legislation to secure a reduction of the hours of labor, and of the press to advocate this reduction.

Resolved, That the fleets and armies whose valor saved the Union from dismemberment were recruited chiefly from among the working men; that justice demands that a liberal policy be pursued towards our returned soldiers and sailors, and that those who answered the first calls of their country should receive at least equal bounties with those who responded to summonses of a later day.

Resolved, That in behalf of the working people of Lowell we will labor to secure the election of such candidates for public office, and such only, as we believe to be friendly to these measures, and competent to promote their successful adoption.

This undertaking to create a distinctive labor party in local politics caused more or less excitement which was reflected in the press. A largely attended meeting was held a few days later in Jackson Hall, under the auspices of an "Amalgamated Short Time Committee," which brought forward as orator of the evening J. B. Howe, of Boston. The ever broad-minded Dr. J. C. Ayer also spoke briefly, urging "organization of workingmen for their own interest, as capital is organized for its own protection." The following nomination for the Legislature were made: Senator, Charles F. Howe; representatives, Foster Wilson, Lorenzo D. Cogswell, I. Henry Paige, Benjamin L. Butterworth, Charles Hunt, Foster Nowell.

A characteristic proceeding followed. A Democratic party caucus, seeing capital to be made out of this movement, next day adopted the foregoing list of candidates as its own. Such action may or may not have been helpful to the laboring man's cause. In the ensuing election the Republicans as usual carried the city; of the workingmen's candidates only Foster Wilson was elected.

About 1885 there was a general strengthening of class consciousness in Massachusetts which was at least mildly reflected in Lowell. The time was that in which Henry George's "Progress and Poverty" was first attracting the attention of the more progressive American bourgeois, whose beau ideal of social reform it has been and is. Making much less of a stir but influencing a few thinking workers and "intellectuals" here and there, a certain Wilhelm Liebknecht, member of the German Reichstag, lectured in Boston in 1886, as in several other American cities. He was accompanied by Dr. and Mrs. Edward Aveling, of London, the wife a daughter of Carl Marx. This visit effected the introduction of scientific socialism into the United States, occurring just prior to the greatest effulgence of romantic or utopian socialism, that promoted through the famous book "Looking Backward."

In Lowell the Central Labor Union was formed in 1887. It was

composed of delegates from all the local unions. These were not so many, all told, considering the number of ununionized employees in the city. Lowell was then—and still is—a hard town from the viewpoint of social propaganda. An important point was gained, from the unionists' contention, when in 1890 the spinners' union was formed. Two years later the Central was found strongly supporting the 54 hour law for women and child workers, the final enactment of which was one of the achievements up to that time in safeguarding the health of those workers who are peculiarly helpless and liable to exploitation. The bill was passed May 19, 1892. It was a great victory for labor and yet not, as the sequel proved, in any way a real defeat for the manufacturers who managed to live under it and in many plants to improve their product in directions requiring enhanced skill and personal interest on the operatives' part.

A Generation of Normal Business Growth—Recovery of the business on which the life of Lowell depended, from the partial prostration which overtook them during the Rebellion, was virtually complete before the panic of 1873 temporarily retarded their growth again. After that somewhat artificial depression (which was due in the main to excesses of speculation and the weaknesses of our unscientific monetary system) the industrial life of the city ran on quite smoothly, with the usual ups and downs of commercial elation and depression, but with very few occurrences that were in any way startling or epoch making.

How the city had suffered during the war was proved numerically by the Massachusetts census of 1865. On July 3 of that year citizens learned for the first time through an informal announcement made by Samuel A. McPhetres, appointed by the Legislature to take the Lowell census, that their population had dropped from 36,227 in 1860, to 30,757 in the month of President Lincoln's assassination. No note of discouragement was heard, nevertheless. The whole city went to work.

Another bit of evidence of the depressed state of the cotton industry out of which Lowell had to emerge, may be noted from figures collated by Edward Atkinson at the beginning of 1864 for the preceding year. He found then that the number of idle spindles was 2,169,650. As the total number of spindles in the States surveyed was 4,288,113, it was evident that only about half the spindles were in operation in the last full year of the war.

The rapidity, in especial, with which the cotton manufacture began to improve after the cessation of hostilities gave cause for abundant optimism in Lowell. In July and August, 1865, the newspapers were filled with such statements of the revival of business as the following, from the "Citizen:"

With the return of peace and the greater demand for cloths and dry goods generally, a steady increase in production is noted. As is well known, the season of quiet has been well improved in refitting machinery in our mills, and to some extent in replacing old works with new, and the introduction of machinery for the production of new fabrics. In the Suffolk mills, as also in the Lawrence, these changes are most marked, the former now turning out new and beautiful styles of woolen and mixed goods for both men's and women's wear. On the Lawrence Corporation the manufacture of hosiery, shirts and drawers is now so well systematized that 700 dozen shirtings are produced daily, while the number of shirts and drawers amounts to 35 dozen each day; and what is more, the style and texture of the goods compares favorably with the best English fabrics of this description. It is certain that the coming fall and winter will witness a very large increase of the industrial output of our city.

The importance, economic and social, of the mill agent was probably at its height in the seventies and eighties. As the older generation of shareholders died off their heirs became more and more accustomed to leave all details of the manufacture to the treasurer, with offices in Boston; and he in turn had so many financial duties and responsibilities that he leaned heavily upon his man at the mill for judgment concerning all details of operation. It was, fortunately for the mills and for the community, an era of able mill men who, if less daring and spectacular than some of the leaders of the same industry in Southern Massachusetts, at least were always conservatively progressive. Critics, like the late General Butler, often assailed the absentee ownership of the factories, but they were usually quick to admit that the resident agents did about as well as could be expected. Collectively the mill agents formed a group of men whose influence in public and institutional affairs was very powerful. In contradistinction to some of the agents whom they succeeded they were nearly all men who had risen from the ranks.

In 1868 Alexander G. Cumnock, destined to leadership in American textile education, became agent of the Boott corporation. He was born at Glasgow, Scotland, in 1834, a son of Robert L. Cumnock, who in 1848 came to this country and settled on a farm at Mason, New Hampshire. Of eight sons of this Glaswegian, five became successful manufacturers. Alexander Cumnock came to Lowell at twelve years, and after education in the public schools and at a commercial college, entered the employment of the Hamilton Company. Thence he rose from position to position until upon the retirement of William A. Burke, in 1868, he was chosen agent of the Boott corporation.

In 1874 the agency of the Merrimack Company, the oldest of the great corporations, was assigned to Captain Joseph Smith Ludlam, born at Cape May, N. J., in 1837, a navigator who had seen much

service in China and the Orient generally and a life-long friend of General C. G. (Chinese) Gordon. Under this leadership the company, with its affiliated print marks, lost nothing of its old-time reputation.

Charles F. Battles, agent of the Tremont and Suffolk from 1858 onward, died in 1870. He was succeeded by Edward W. Thomas.

Homer Bartlett, first agent of the Massachusetts Cotton Mills, and later treasurer, resigned January 22, 1872, after thirty-two years' service with the corporation. He was born July 19, 1795, at Granby, and was graduated from Williams College in 1818. He died in 1874. The resident agent down to 1889 was Frank Forbes Battles, born at Dorchester, in 1820, and educated in the Lowell public schools, where he was a classmate at the high school with General Butler and Captain Gustavus V. Fox. He was paymaster of the Prescott Mills prior to their absorption by the Massachusetts in 1856, and thereafter was appointed agent of the combined corporations. Mr. Battles was succeeded by William S. Southworth, born at Chicago in 1849, and named after an uncle who was agent of the Lawrence Manufacturing company in Lowell. Mr. Southworth came to Lowell as an office boy on the Lawrence in 1864. After various services, including five years with the Draper Manufacturing Company at Hopedale, he returned to Lowell in 1882 to become superintendent of the Massachusetts. After his appointment as agent in 1889 he was enabled to enter upon the great course of expansion at Lowell and in the South which has put the Massachusetts into the very forefront of New England manufacturing enterprises.

William Alvord Burke, whose agency at the Boott Cotton Mills was terminated in 1868, in order that he might accept the office of treasurer of the Tremont and Suffolk, was another of the leading mill men of this era, and one who kept his residence in Lowell. He was born at Windsor, Vermont, in 1817. As a boy he displayed exceptional capacity for learning languages, but the family circumstances prevented his going to college and at fifteen he was apprenticed to the machine shop of the Nashua Manufacturing Company. He learned the machine trades thoroughly, and at twenty-three he was at the head of the Gay Machine Works in Nashua. Two years later he was called to direct the repair works of the Boott Company in Lowell. In 1845 he was made superintendent of the Lowell Machine Shop, a position which he held until 1862, when he was made agent of the Boott. In 1876 he was elected treasurer of the Machine shop, holding this responsible office until 1884. He died in 1887.

In 1884 Oliver H. Moulton, born at Dover, New Hampshire, in 1829, came to Lowell as agent of the Hamilton Company. He was likewise a director of the Kitson Machine Company, the Shaw Stocking Company and other manufacturing enterprises.



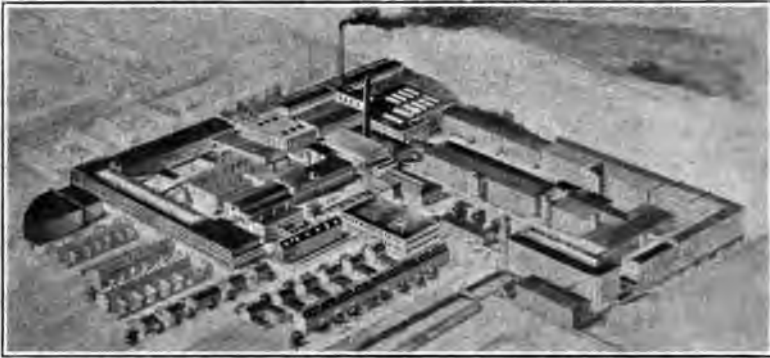
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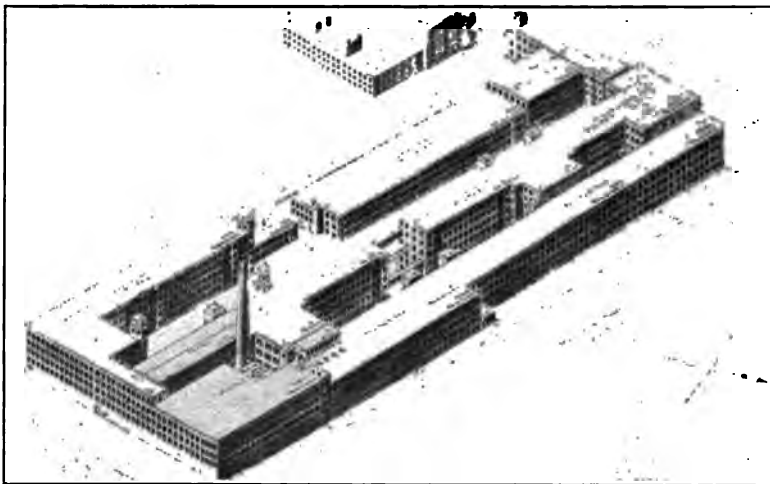
TREMONT AND SUFFOLK MILLS.



MASSACHUSETTS COTTON MILLS.



MERRIMACK MANUFACTURING COMPANY.



BOOTT MILLS.

The destinies for the Appleton Company for many years were directed by Charles H. Richardson, born at Northfield, Massachusetts, in 1843, and one of the highly trained "graduates" of the Lowell Machine Shop. Mr. Richardson rose through sheer ability to one of the large positions of the textile industry.

Agent of the Lowell Manufacturing Company from 1852 to 1874, and thereafter its treasurer until his death in 1880, Samuel Fay was one of the most conspicuous figures in Lowell manufacturing in the post-bellum period. Born at Warwick, Massachusetts, in 1817, he came to Lowell at sixteen and after brief clerkships in several downtown stores he became an office boy in the counting room of the Lawrence corporation. He rose rapidly and presently was recommended by his employers for the position of paymaster. He here enjoyed the confidence of the then agent, Alexander Wright, whom he succeeded after the latter's death. Mr. Fay was accounted one of the mathematical experts of the textile trade. "His ability," said a writer in a New York trade journal in 1880, "to estimate and compute the relative cost of raw material and manufactured goods was almost marvelous, and his associates were frequently astounded at the accuracy of his computations and predictions, his foresight being wonderfully great and correct." He was for a long time treasurer of the National Association of Wool Manufacturers.

Lowell Manufacturers at the Centennial Exposition—Under such leadership as the foregoing, New England textile manufacturers made a particularly good showing at the Philadelphia Centennial in 1876. The Lowell mills were represented with a display of sheetings, shirtings, drillings, calico flannels, printed calicoes, furniture coverings, bleached and dyed cambrics. The machine shops likewise sent exhibits.

The figures of operation of the principal Lowell corporations in this year of the American centennial, just half a century after the incorporation of the town, as compiled by Webber, may be cited:

Name of Company.	No. of Spindles.	Operatives.	Lbs. of Cotton.	Yards Produced.
Merrimack Manufacturing Co.....	158,464	2,700	6,344,000	37,700,000
Hamilton Manufacturing Co.....	56,080	1,225	3,900,000	14,040,000
Appleton Manufacturing Co.....	42,458	600	4,992,000	12,480,000
Tremont & Suffolk Manufacturing Co.	93,528	1,400	7,280,000	19,760,000
Lawrence Manufacturing Co.....	92,000	1,700	9,100,000	22,920,000
Boott Manufacturing Co.....	112,752	1,875	6,760,000	23,920,000
Massachusetts Manufacturing Co...	101,720	1,475	9,256,000	27,768,000

These figures represented not only growth of output, but conservation of human labor. Scientific management, or "efficiency engineering," was, of course, still far in the future. In 1876 the idea, nevertheless, of improving the ratio between labor cost and value of product was already strongly present. It was appreciated to some

extent, at least, that production is variable, depending much on the skill of the operative and his interest in his work.

What a lessening in costs of producing cotton cloth had taken place since the beginning of the industry was disclosed in a paper read in 1876 before the National Association of Cotton Manufacturers by William A. Burke. Mr. Burke's comparative figures were based on the costs of making sheetings and drillings at the Boott mills in 1838 and in 1876. They showed that the cost of labor required to make a pound of cloth in the former year was 4.7935, while in the latter year it was 2.8533. Otherwise expressed, one hour's labor per person in the Boott mills of 1876 yielded 3.30 pounds of cloth, while in 1838 it would have given only 1.012 pounds. This enhanced productivity, Mr. Burke explained, as due to: (1) larger mills with better opportunities for arranging machinery, the standard having grown from 6,000-8,500 spindles in 1838, to 20,000-50,000 spindles in 1876; (2) inventions and new methods, prominent among the former being the Wellman card stripper, use of lapboard (so-called) in double carding, stop motion on drawing frames, ring spinning in place of mule spinning, and use of slashers for sizing; (3) doubling of number of looms tended per individual; (4) fifty per cent. reduction of piecing, in progress from bale to cloth. Such data as have more lately been compiled on the effect of fatigue upon breakages, on the limits of the "speeding up" process, were still to be compiled in 1876.

New conditions of selling and price of raw cotton confronted Lowell manufacturers after the war. The financial straits in which many cotton planters at the South found themselves is generally understood to have been the original excuse for the formation of the New York Cotton Exchange in 1870. This institution, it would perhaps be conceded by most New England textile men, has not been an unmixed blessing to the industry. Copeland says of it that "so far as the selling of spot cotton is concerned, its usefulness has steadily waned with the reestablishment of the simpler method of marketing." The metropolitan exchange, in brief, has not been a "traders' market," but primarily a speculative, or gambling, exchange.

The Menace of Southern Competition—A considerable portion of the period of Lowell history now under consideration was one in which most New England manufacturers imagined themselves engaged in a bitter struggle for existence against Southern competition. How this fantasy arose is easily seen. Mills of the South had a small but impressive exhibit at the Philadelphia Centennial in 1876. In the years immediately following, factories began to be built in the Piedmont belt from Virginia to Alabama. These new manufactories had their own propagandists, who made the most of the argument from location. It soon became a fashion in many quarters to predict that the



BAY STATE COTTON CORPORATION.



SILESIA MILLS OF UNITED STATES WORSTED COMPANY.

multiplication of mills close to the cotton fields spelled the ruin of such cities as Lowell.

These jeremiads overlooked, of course, certain very patent factors favoring continued prosperity of the cotton industry in New England. They ignored the truth that with millions of unclad and half clad people in the world there was room for all the factories of both sections. The value of experience passed on from generation to generation of textile workers was not always properly appreciated. Neither was it foreseen that many Northern mills, as notably those of New Bedford, would become more profitable than ever before through turning their attention to the making of fine and high-priced goods, in which the element of the worker's skill is far more significant than the cost of the basic raw material. Pessimism, likewise, failed to take into account the larger reservoirs of quick capital which are available in thrifty New England, for the manufacturer who can command ready cash in buying his cotton is always at an advantage over the other manufacturer whose bank account and credit are more limited. These and other factors, which are now generally understood, operated to keep Lowell's spindleage gaining even at a time when many people were anxiously expecting that the city's basic industry would soon begin to decline.

Intensive Improvement of Lowell's Water Power—While water power, with the example of Fall River and its coal-powered mills before them, was undoubtedly not so highly esteemed among mill men in the second half of the nineteenth century as it had been regarded in the earlier decades, no effort was lost at Lowell to utilize to the fullest extent possible the gift of the Merrimack.

During 1875 and 1876 much of the Pawtucket dam from "Great Rock" to the Pawtucketville shore was reconstructed under direction of Cleveland J. Cheney, who in 1863 had succeeded Paul Hill as superintendent of the Locks and Canals Company. During this period some 400 men worked in the river bed whenever conditions permitted.

In 1889, again under Mr. Cheney's supervision, an extension of the Boott Company's penstock was accomplished, and at the same time work was begun of removing obstacles in the river at Hunt's Falls, with the object of lowering the water in the basin between Central and Aiken street bridges and thus increasing the head of water in the turbines all along the river front.

New Industries for a Growing City—While the established manufacturing corporations were either holding their own or making gradual advancement, Lowell was continually gaining new industries, usually, up to 1893, in some way connected with the textile trades. The advent of at least a few of the most considerable of these should be noted in this narrative

Richard Kitson, founder of the machine shop that long has borne his name, and whose principal development was from about 1860 onward, was born at Cleckheaton, Yorkshire, England, in 1814, a son of John Kitson, a card clothing manufacturer. He was trained in his father's shop. In 1849, when a valuable patent was about to expire and when the firm was in difficulty on account of the dishonesty of an employee, the younger Kitson received a proposal from Francis Calvert that he migrate to Lowell. He did so and in a small shop on Broadway began to make the first needle-pointed card clothing in America. Being a born inventor, Mr. Kitson presently turned his attention to the construction of pickers, on which he received many patents. In 1852 he devised a single card-opening machine which became popular throughout the textile industry. He introduced the needle-pointed cylinder to take the place of the beater in certain lap-pers. The "trunk system" of opening and cleaning cotton fibre owes its invention to him. These machines of Mr. Kitson's contriving were at first made by contract in other shops, as he lacked the capital to establish such a machine shop of his own as he desired to have. In 1860, however, he succeeded in obtaining the means to buy land on which an old school house stood to the rear of the present Kitson Machine Shop. This was the beginning of one of Lowell's most prosperous manufacturing concerns. The business was incorporated in 1874 under the title of The Kitson Machine Company, of which Mr. Kitson was elected president, serving until his death, July 14, 1885. Its expansion since 1910 has been one of the notable features of the Lowell industrial situation.

Comb pins began to be made at the shop of Walter H. Bagshaw about 1871. This manufacturer was born at Derbyshire, England, in 1847, being the son of a pin manufacturer. In 1867 he came to the United States to take a place in a sewing machine company. In 1871 he established himself at Lowell as a comb pin manufacturer, with one boy as an assistant. His business increased rapidly and within a short time he was employing about 25 men in making this specialty.

The largest American business of making reeds and harnesses was established in Lowell by Robert Carruthers, born at Blackburn, Lancashire, in 1846, of a family whose male members for more than a century had specialized in this manufacture. Mr. Carruthers came to this country in 1872. After employment with the Providence Reed and Harness Company, he went into business for himself, at first, in Lawrence, and then, while looking for larger quarters, decided to move to Lowell. His establishment in Dutton street soon became the largest of its kind in North America.

Wilson W. Carey, born at Lempster, New Hampshire, in 1831, and trained as a wood-worker, brought the manufacture of wood-

working machinery, hangers, shafting and pulleys to Lowell, beginning in 1867. In the following year he took a partner, George W. Harris. This firm continued in business for twelve years and then Mr. Carey became the sole owner.

A machine shop for manufacture of steam and gas fitting specialties was founded at first in Howe street and later in Middle street by Horace R. Barker, who in a relatively short life became one of the city's foremost citizens. Mr. Barker was born in 1829 at Lexington, Massachusetts, the son of a skilled maker of cutlery. He served an apprenticeship with the New England Gas Pipe Company of Boston. In 1851 he started his business in Lowell. He died of enlargement of the heart in 1886.

Specialties in the way of patent warping, baling and beaming machines, expansion combs and traverse card grinders, which are now made in large quantities in Lowell, for sale to textile manufacturers all over the world, are due to the inventive talent of Thomas C. Entwistle, who started his shop in the city in 1887. Mr. Entwistle was born at Belmont, Lancashire, England, in 1846, a scion of a family of mill managers. He learned his trade in his native country and came to America in 1869. He helped set up at Manchester, New Hampshire, one of the first slashers ever used in that State. He patented a new type of warping machine. For five years he was with the Drapers at Hopedale. In 1880 he came to Lowell and organized the Phoenix Machine Company, of which he was agent. Presently he left to take a more important position at Hartford, Connecticut, and then in 1887 he returned with sufficient capital to start a machine shop on his own account.

In 1871 the Pevey brothers, John M., George E., Franklin S. and James A., sons of Abiel Pevey, for twenty-five years foreman of the Lowell Machine Shop, opened their extensive foundry on Walker street, which was enlarged in 1882 and again in 1887. This became one of the largest firms of its kind in the United States, its castings going to every part of the continent, in addition to supplying regular and rush work for the leading manufacturers of Lowell.

Copper washers were made for the first time in the United States at the Dutton street shop of David H. Wilson, born at Paisley, Scotland, in 1839, and educated in Lowell public schools, in the carpet designing department of the Lowell Manufacturing Company, and under David A. Dana, coppersmith. In 1874, with his brother, John C. Wilson, he inaugurated a metal working establishment with distinctive specialties.

From about 1896 active efforts of the Board of Trade, of which John Smith was secretary, to bring new businesses to Lowell were crowned with many successes. One of the most conspicuous of the

companies thus induced to settle in the Spindle City was the Massachusetts Mohair Plush Company, one of the American pioneers in weaving the long silky hair of the Angora goat, for generations a specialty of the English city of Bradford.

Lowell's prominence in the knit goods industry was assured in May, 1869, when the Lowell Hosiery Company was incorporated with a capital stock limited to \$200,000. The company started with a capital of \$100,000, which was subsequently raised to \$175,000. The charter was granted to William F. Salmon, Thomas Nesmith, Hocum Hosford and their associates and successors.

Another of the remarkable industrial developments of this period in Lowell grew out of the invention of machinery for making seamless hose. Residents of the Pawtucket street neighborhood about 1877 became aware of a newcomer in Arlington street, a man of strong features, picturesque black curly hair and heavy mustache, who was reputed to be a clever inventor. This was Benjamin Franklin Shaw, who, as textile people knew, had for the past ten years been working on apparatus for making seamless stockings. To the educational world Mr. Shaw was already well known, for in the years 1860-64, while in the employ of a Philadelphia publishing house, he had compiled two famous geographies, based on objective and associative methods which were then only beginning to be understood.

When Mr. Shaw came to Lowell from Cambridge in 1877, his textile project was virtually ready for fulfillment on a large scale. It immediately gained the attention of local capitalists and the Shaw Stocking Company was formed. In 1880 Mr. Shaw took his loom to England, where it was exhibited to manufacturers from every European country and, under most picturesque circumstances, to the Lord High Chancellor at Westminster palace. The apparatus was speedily recognized to make such an advance in the art of knitting as to make its inventor the compeer of Lee, who invented the first stocking frame.

Mr. Shaw was managing head of the stocking company that bore his name down to his death in 1890. Apart from his standing in the manufacturing world, he gained celebrity throughout New England through his purchase and development of Ossipee Park, on the eastern slope of the New Hampshire mountain of that name, whose falls and scenic outlooks were carefully preserved from vandalism.

The Multiplication of Patent Medicines—The fame of Lowell as a patent medicine centre grew apace.

The Hood manufacture of patent medicines, which through ingenious advertising rivaled the Ayer company in international publicity, was founded by C. I. Hood, born at Chelsea, Vermont, in December, 1845, the son of an apothecary from whom he first learned the elements of the drug business. Mr. Hood came to Lowell as a youth

and served a five years' apprenticeship in the shop of Samuel Kidder, at Merrimack and John streets. For two years he was prescription clerk in the establishment of Theodore Metcalf, Boston, which has had a remarkable reputation for the successes of its "graduates." In 1870 Mr. Hood bought an interest in the store, later Ellingwoods', in the old Barristers' Hall building, at the corner of Merrimack and Central streets. Here Hood's sarsaparilla was conceived. It had local success from the outset. In 1878 the business had grown to such an extent that rooms for the manufacture were engaged in Southwick block, Prescott street. A year later the Crosby building, Church street, was rented. In 1882 the company contracted for the present large laboratory near the railroad station, four stories high, with floor one hundred by fifty feet and with a bottling capacity of 10,000 bottles a day.

Municipal Affairs After the Civil War—The administration of municipal affairs in Lowell from 1865 to 1893 continued to be on a general high plane of honesty and efficiency, though it is not to be denied that occasional occurrences pointed to such a situation as led in the present century to adoption of the commission form of government. Only good men of either of the political parties could be elected to the mayoralty; the council sometimes contained members of rather small calibre.

No loyal citizen of Lowell, certainly, need to be ashamed of the mayors who held office from the Civil War onward.

Josiah Greenough Peabody, who was mayor of Lowell at the close of the Civil War, has already been mentioned. He took a life-long interest in political and municipal affairs. As a young man he was a Democrat, but the repeal of the Missouri Compromise Act threw his allegiance over into the Republican party, with which he remained during the rest of his life. In 1837 he served a term in the Legislature. In the years 1850, 1859 and 1860 he was in the common council. In 1865 and 1866 he was mayor and again in 1872. In all the years he served the city he missed but one meeting of any kind at which he was supposed to be present. He had among other interests the affairs of the Merrimack River Savings Bank, of which he was president for twenty-four years and of Dean Academy, Franklin, of which he was a trustee; of the First Universalist Church in Hurd street, of which he was long the oldest member. No finer example of intelligent and high-minded citizenship occurs in the history of Lowell.

George F. Richardson, who was mayor in 1867 and 1868, was one of the three lawyer sons of a Tyngsboro attorney, all of whom attained distinction in their profession. He was born in 1829, and educated at Phillips Academy, Exeter; Harvard College, from which he was graduated in 1850, and the Harvard Law School. In 1862-63 he served in

the common council. After his mayoralty, in 1871 and 1872, he was State Senator from Lowell. His other public services were many. For a number of years he was president of the Middlesex Mechanics' Association and a trustee of the Public Library, in whose work he took great interest. He was president of the Lowell Manufacturing Company and a director of the Prescott mills.

Jonathan P. Folsom was mayor in 1869 and 1870. He was born at Tamworth, New Hampshire, October 9, 1820. He came to Lowell in 1840 to take clerical work with Dinsmore and Reed. Like several other Lowell men of the middle decades he tried the South for a time, settling at Benson, Alabama, but after six years he returned to the Spindle City. He built up a dry goods business on Merrimack street and soon was accounted among Lowell's successful men. He served in the common council of 1856 and 1867; as alderman in 1859, 1861, 1862 and 1878. After his mayoral years he had two terms in the Legislature. He was a director of the Old Lowell National Bank and a trustee of the Central Savings Bank.

Edward Fay Sherman, mayor in 1871, was a brilliant graduate of the Lowell High School and of the 1844 class of Dartmouth College. A descendant of Rev. John Sherman, second minister of Watertown, he was a son of Captain Edward Sherman, who came to Lowell from Wayland in 1824. The younger Sherman had a brief experience as a schoolmaster. He was admitted to the bar and later became secretary and treasurer of the Traders' and Mechanics' Insurance Company, of Lowell. He was in the Massachusetts houses of representatives of 1862 and 1867. He died in Lowell, February 10, 1872, on his fifty-first birthday.

In the years 1873, 1874 and 1875, Francis Jewett was mayor. This very able business man had a career which is of national as well as local interest for he was one of the founders of the dressed beef business, as it is carried on to-day, the firm which he founded being one of the components of the "beef trust." Mr. Jewett was born at Nelson, New Hampshire, September 19, 1820. After preliminary schooling in the district school of Nelson, he entered the Baptist Seminary at Hancock, a nearby town, where he continued his education until he was twenty-one. He acquired his father's farm, but trading in cattle interested him more. In 1848 he came to Lowell and took work at the slaughter house of Clement Upham, in Chelmsford. He learned what he could about the meat business and in 1851 he started a concern of his own. In 1877 the firm became Jewett & Swift, the first dealers in dressed beef in Lowell and the prototype of the present Swift organization of Chicago and Boston. Mr. Jewett was not only a remarkable man of business, but a popular municipal officer. He had two years in the common council, 1864 and 1865, and two in the board of aldermen,

1868 and 1869. When he first ran for mayor he had as opponent former Mayor Hosford, who was the citizens' candidate. Mr. Jewett was the only one on the regular Republican ticket to be elected. In 1875 he was nominated by both Republican and Citizens' parties and had a practically unanimous election. In 1877 and 1879 he was Senator from the Lowell district. He was a director of the Wamesit National Bank; senior vice-president of the Merrimack River Savings Bank; director of the Erie Telephone and Telegraph Company; president of the Middlesex Odd Fellows' Building Association; president of the proprietors of the Odd Fellows' Building; director in the Swift Refrigerator Company; director of the Ayer Home for Young Women and Children. He died April 22, 1896.

Charles A. Stott, mayor in 1876 and 1877, was a son of the woolen manufacturer, Charles Stott, formerly of Rochdale, England, whose story has already been told in this history.

The younger Stott was born in Dracut, August 18, 1835. He received his education in the public schools of Lowell, of whose high school he was a graduate. After brief service in a hardware store and in the counting room of the Merrimack company, he went into the employ of his father's company, the Belvidere Woolen Mills in 1856. Down to the senior Stott's death, in 1882, he was clerk and paymaster of this company. Thereafter he became agent and treasurer. Before the Civil War, Mr. Stott was captain of Company H, Sixth Regiment, Massachusetts Volunteer Militia. Upon the regiment's enlistment he went in as major and had nine months' service under Colonel A. S. Follansbee. In politics Major Stott was a Republican, who served the city in the common councils of 1859 and 1860 and the board of aldermen in 1869 and 1870. He was chairman of the Republican State committee in 1881 and 1882 and presidential elector in 1884.

John A. G. Richardson, the first Democratic mayor of the city in twenty-eight years, was elected in 1878 and reelected the year following. He was born in Lowell, October 13, 1840. With a brother, he conducted a successful provision business. Personally a very popular man, he was elected to Legislature in 1874 as a Democrat from the Republican stronghold of Ward Four. He was a member of Company C, Sixth Regiment, during the Civil War. In 1882 a desire to operate in a larger business field led to his going to Minneapolis, where the rest of his life was spent.

The mayoralty contest of 1880 brought to the front one of the ablest and most eloquent of the younger men of his time, Frederic T. Greenhalge. The pride with which a former teacher of this statesman and orator described his youthful attainments to her class of ten-year-old boys and girls is well recalled by the present historian. Mr. Greenhalge was born at Clitheroe, England, July 19, 1842. The family

came to America during his boyhood. His early education was received in the Lowell school. He entered Harvard College in 1859, but on account of military service did not finish his course. He was admitted to the bar in 1865. He was in the common council in 1868 and 1869. From 1871 through 1873 he was a valued member of the school board. His distinguished career, after the years of his mayoralty, will appear in the later narrative.

George Runels, mayor in 1882, was born at Warner, New Hampshire, February 3, 1823. After ordinary schooling in district schools and New London Academy, he moved to Lowell and learned the stone cutter's trade. Of a naturally adventurous disposition he did not really settle down in Lowell until several years later. One of his experiences was to embark on a three years' whaling voyage from Salem. About eighteen months out, the ship was wrecked on one of the Fiji Islands. The crew were three days in open boats and then picked up by a vessel which landed them on the coast of New Zealand. Mr. Runels remained in the British colony for three months, during which time he helped to build the first large wharf in the islands. Afterwards he shipped on a trading vessel and for more than a year saw something of most of the East Asiatic ports. In 1845 he returned to Lowell and resumed stone cutting, but the lure of California caught him and in 1849 he went West. Five years later he was back again to engage in business once again. He retired with a competence in 1878. He served in the common council of 1862 and in the board of aldermen in 1864 and 1873.

Many creditable achievements stand to the credit of John J. Donovan, mayor in 1882 and 1883. This very able man of affairs was born at Yonkers, New York, July 28, 1843. His widowed mother brought him to Lowell in 1846. He had a good education in the Washington grammar and Lowell high schools. On leaving school he entered the employment of David Gove, at 223 Central street. At twenty-one he was admitted to partnership. In 1877 Mr. Donovan became interested in paper-making in Dracut and seven years later he organized the Atlantic Telegraph Company, of which he was treasurer. In 1882 he was serving on the board of overseers of the poor when he was elected mayor on the Democratic ticket. The electorate approved his administration by giving him a second term. His mayoralty was a time of large achievements. The Aiken street and Central bridges were then practically completed. New buildings were erected at the City Farm. The Pawtucket grammar school and the Powell street school represented important additions to the city's educational plant. Largely through the mayor's initiative the annual dues for service from the Public Library were remitted and free reading rooms were opened. After his years of office Mr. Donovan became Democratic candidate

for Congress from the eighth Massachusetts district and was nearly elected. He was a felicitous public speaker and a man who made a remarkably favorable impression on public occasions.

Edward J. Noyes, mayor in 1885, was born at Georgetown, September 7, 1841. He was educated in the schools of his native town and in Lowell. At age of nineteen he took part in the recruiting of soldiers for General Butler's Gulf of Mexico expedition. He was with the general at Ship Island and at New Orleans. He saw much active service in Louisiana and Texas, receiving a wound in the shoulder in May, 1863, which incapacitated him for some time. He had by this time risen to the rank of major. He returned to Lowell in 1864. In 1868 he studied law at Columbia University, New York. In 1881 he was elected chief of police of Lowell. His election to the mayoralty in 1885 was by a vote of 5,012 against 4,477 for his opponent, George W. Fifield. During his year the municipal debt was reduced by about \$200,000. In 1888 Mr. Noyes was again chief of police.

The local Democratic party in 1886 elected and the following year reelected to the mayoralty James C. Abbott, born at Andover, June 3, 1823, a graduate of Phillips Academy, Andover, for two years a student at Dartmouth College and a student at the Harvard Law School. Mr. Abbott practiced his profession in Lowell for more than fifty years, with honor and reasonable emolument. He was for many years president of the First National Bank and president of the Lowell Mutual Fire Insurance Company. He was elected to the board of aldermen in 1880. He gave six years to the service of the school board.

The Republican party came back in the city election of 1888, the beginning of Charles Dana Palmer's three years' mayoralty. Mr. Palmer, a son of George W. Palmer, book publisher, was born at Cambridge, November 25, 1845. As a member of the 1864 class at the Boston Latin School, he received one of the four Franklin medals. He entered Harvard College and was graduated in 1868. Going into the service of the Washington Mills Company, Lawrence, he showed such ability that in 1869 he was chosen by the United States commissioners of Paris Exposition to gather statistics concerning the wool industry of Canada. In 1872 he engaged in the manufacture of woollen shoddy at North Chelmsford, whence his long connection with Lowell affairs. In 1880 he married Rowena, youngest daughter of Fisher A. Hildreth, who had died in 1873, leaving a large estate. After his marriage much of Mr. Palmer's time was given to managing the Hildreth properties.

George W. Fifield, a Democrat, was elected mayor in 1891 and reelected in 1892. He was born at Belmont, New Hampshire, in 1848 and was educated at Gilmanton Academy. He learned the machinist's trade, and, being a man of vigorous personality and very considerable inventiveness, he soon rose out of the employee class. The Fifield

Tool Company, which he organized, became one of the principal manufacturing companies of its kind in the United States. Mr. Fifield was also president of the Appleton National Bank, of the Lowell Electric Light Corporation and director in many other business enterprises.

Lowell's Representatives in Congress—The Congressional representation of Lowell was regarded by local business men and working men as a matter of especially vital concern in the years in which the country was recovering from the effects of the Civil War. Most representatives of the manufacturing interests were strongly committed to a high tariff. From the end of Congressman Train's second and last term in 1863 down to 1870 the district was represented by Hon. George S. Boutwell, of Groton, afterwards Governor of the State. In the latter year George M. Brooks, later judge of probate for Middlesex county, was chosen, to be followed two years later by Constantine Esty. In 1874 John K. Tarbox was elected; in 1876, General Butler; from 1878 through 1882, William A. Russell; in 1884, Charles H. Allen, of Lowell, being reëlected in 1886; in 1888, Frederic T. Greenhalge, also of Lowell; 1890, Moses T. Stevens, reëlected in 1892; 1894-1902, William S. Knox, of Lawrence; 1902-12, Butler Ames, of Lowell; 1912, John Jacob Rogers, of Lowell, the incumbent at this writing.

During the years 1866-76, General Benjamin F. Butler was continuously in Congress, but not from the North Middlesex District. The Lowell statesman had acquired a summer residence on Cape Ann and was regularly elected as a Republican of independent proclivities from the Essex District. It was during this service that he espoused the cause of fiat money with all the intensity of his temperament.

General Butler's Governorship—General Benjamin F. Butler, of Lowell, was elected Governor of Massachusetts in 1883 as a Democrat upon a platform which promised, among other measures, to undertake a thorough investigation of the State institutions. The electorate knew in advance that the gubernatorial thrust would be directed especially against the Tewksbury almshouse concerning the management of which serious charges had been made at intervals for some years past. The proximity of this institution to Lowell naturally led General Butler's fellow-citizens to be keenly interested to see what progress he would make with his plan of a general housecleaning at Tewksbury.

The narrative of this investigation, which stirred the whole Commonwealth during the spring and summer of 1883, and which ended somewhat inconclusively despite the apparent evidences of abuses of management which the Governor's committee amassed, and which the Governor himself presented to the public in the character of a prosecutor, belongs rather to the history of Massachusetts than of Lowell. It should at least be noted that one of the strong points which General

Butler was able to make against the conduct of the State almshouse was the superior record of the Lowell city almshouse, then under direction of Colonel Albert Pinder, situated only eight miles from the other institution and operated without any such ghastly statistics of mortality as had aroused a certain section of the public. One of the most serious charges, indeed, which the investigating committee made against the Tewksbury almshouse was based on figures showing that of babies born at the institution or transported there during infancy practically none survived, the mortality among them exceeding ninety per cent.! The defence, as commonly urged at that period, was that these children were born with inherited weaknesses such that nature in any circumstances would mercifully release most of them from suffering. Upon this argument, which we now know to be in the main baseless (since characteristics acquired in the lifetime of parents are not inherited), General Butler countered by showing that under the city of Lowell's treatment unfortunate babies did not die. In his "Argument before the Tewksbury Investigation Committee" this is a significant passage:

Albert Pinder, superintendent of the Lowell almshouse, testified in answer to questions from Governor Butler: "In the nursery I have an average of from forty to forty-five."

Q. "How old does the nursery include?"

A. "All the way from a birth to nine or ten years old."

Q. "How many children have you in the reform school?"

A. "I think I have twenty-six sentenced children, besides about as many more pauper children."

Q. "Twenty-six convicts—that is, sentenced there by the courts, sentenced there by the Police Court?"

A. "Yes, sir."

Q. "And about the same number of what?"

A. "About the same number of pauper children; they all attend the same school."

Q. "How many children under the age of nine, in the nursery, did you lose last year?"

A. "I don't think I lost a child last year, if my memory serves me right; I have lost one or two this year."

This good showing of the Lowell almshouse furnished the gubernatorial investigator with excellent argumentative material, for in the year preceding the investigation seventy-one out of seventy-two children at the State almshouse had died—this, too, in face of the fact that Colonel Pinder was allowed only \$1.07 for food per child, while the similar item of cost at Tewksbury was \$2.09.

The literature of this now historic controversy about the conduct of the State almshouse from its foundation under a law of 1852 down to the year of General Butler's governorship, is well represented in the collections of the Boston Public Library. From a cursory survey

of it one would not want to pass judgment on the question (which supplied the governor's primary animus) whether or not officers of the Harvard Medical School misused their privilege of receiving a supply of cadavera from this source. It would at all events appear to be well established that the chief executive, with his almost preternatural ability to discover damaging circumstances, did succeed in uncovering about as disgraceful management as has ever gone unchecked for a period of years in any Massachusetts institution. It was at the time gratifying to local pride that the Lowell almshouse could be used to refute the argument that careful and kindly treatment are of little avail in preventing infant mortality among the children of unfortunate parentage.

Activities of City Departments—The departmental work of the city government gradually grew in scope as Lowell attained more and more of the proportions of a large city.

Defects in the plan of appointment of police officers became very apparent in the years just succeeding the Civil War. From the time of incorporation there had been inherited a system under which appointments were made after each election. The policeman's position was thus a part of the spoils system, dependent on political pull rather than personal fitness for the work. This situation was not peculiar to Lowell. To remedy it the Massachusetts legislature passed the Civil Service Law of 1884, Chapter 320. Two years later the title of City Marshal was dropped and that of Chief of Police was substituted. The police department thus constituted has been singularly free from charges of corruption or incompetence.

A serious epidemic of small-pox alarmed the city in February, 1871. The disease got the upper hand and was epidemic all summer. Nearly six hundred persons were attacked by it and 178 of these died. There was much criticism of the health authorities for letting the disease get started, and out of this criticism grew a new efficiency in the handling of problems of the public health.

Streets and bridges were extended as the city continued to expand. An iron bridge at Pawtucket Falls was completed on November 25, 1871. This structure took the place of the former toll bridge, whose story has been told at some length in this history. In this year also was finished and dedicated the iron bridge at Tyngsborough, the costs of which were assessed by the county commissioners according to the following percentages: The county, 38; Tyngsborough, 40; Lowell, 16; Dunstable, 3; Chelmsford, 3. The Aiken street bridge, popularly termed "the red elephant," was completed in April, 1883, at an expense of \$195,000. The opposition that was aroused by the proposal to span the river at this point is well remembered; it was some years before the traffic over the bridge in any way justified its erection; and

even now it carries a much smaller traffic than that of the bridge below it.

A fire of August 4, 1882, destroyed the old Central bridge. In its place was built an iron structure, at a cost of \$113,441, which was opened to traffic in September, 1883.

Problems of a proper water supply for a growing city agitated both the water board and the general public of Lowell for many years. A nearly ideal solution was finally found in the driven well system.

The Merrimack river in primitive conditions brought singularly clear and pure water from the New Hampshire mountains to the sandy intervale lands such as flank the stream from Concord downward. The growth, however, of manufacturing cities and villages on the main stream and on many of its influents during the nineteenth century caused steady deterioration of the quality of the river water. A generation ago the dictum to the effect that running water purifies itself was often repeated in justification of continued use of a supply from the river. This notion was held true down to a comparatively recent date; it was quite effectually disproved by studies of the content of nitrites and nitrates in the water of the Potomac river from Harper's Ferry to Washington about 1906.

In 1869 agitation of the city water problem arose. One engineer's estimate of the cost of serving the city with filtered water was \$740,000. James B. Francis, of the Locks and Canals Company, presently brought out a pamphlet in which the probable cost was set at \$2,000,000. A referendum on the subject of a new system was held on February 23, 1869. It resulted: Yeas, 1,866; nays, 1,418.

This was a victory for the joint special committee on a supply of water for the city of Lowell. Their report had shown conclusively the inadvisability of attempting to draw a water supply from the Concord river or from Beaver brook. No ponds in the vicinity were found to have sufficient drainage area to guarantee a water supply for a city of rising forty thousand people with an average daily consumption of sixty gallons per inhabitant. The Merrimack was indicated as the offering the one feasible source of supply.

The need, meantime, of a more adequate system of obtaining pure water was shown by the continued use of wells in the most crowded parts of the city. Some of the wells, on the outskirts, were presumably fairly innocuous. One at the corner of Dummer and Lowell streets was understood to be a menace, even in days when the danger of polluted water was less universally realized than now. "This well," wrote the investigating committee, "is evidently supplied mainly from the washing of the streets and the drainage of sewers and vaults, filtered through a few feet of earth. The result is a compound which

may fairly be characterized as poisonous. It is understood that the water, when accessible, is used by at least 100 families."

A decision to introduce a system of filtered water having been reached, a board of water commissioners was appointed in January, 1870, to hold office for three years, unless the proposed water works should be finished sooner. Under this board was constructed one of the most elaborate systems of "natural filtration" yet undertaken anywhere.

The basis of the system was a filtering gallery, whose intake was on the Pawtucketville side of the river about quarter of a mile above the falls. The water was admitted to the gallery from the river through a metal pipe. The length of the gallery was 1,300 feet. It connected with a conduit whose total length from the inlet chamber to the terminal chamber was 14,182 feet. Under Beaver Brook, which was crossed near the Dracut navy yard, the water was carried by an inverted syphon. Thence the conduit ran to the newly established pumping station in West Sixth street, Centralville.

The pumping station that was constructed by the water commissioners has long been one the show places of Lowell. Its operations are spectacular enough to interest the general public; they were for a long time enough of a novelty to bring engineers to visit the works. The Morris engine, indeed, which was installed as part of the original pumping arrangements, was soon unique. It happened that in 1872, when the commissioners were considering pumping apparatus, Henry J. Morris, of Philadelphia, built for the Spring Garden Works of that city an engine which was considered remarkable on account of its large results from a small expenditure of coal. It specifically was guaranteed to raise seventy-five million pounds of water one foot on one hundred pounds of coal; but in tests it far exceeded that estimate. It had a guaranteed capacity of five million gallons a day, an amount fully ten times the then requirements of the city of Lowell. Opinions differed as to the wisdom of installing so large an engine; but it was finally decided to include the future in the planning, and a duplicate of the Philadelphia engine was contracted for at a cost to the city of \$75,000 and a loss to the manufacturer, so it has been stated, of about \$20,000. Soon after the engine was finished in 1873 the Morris works were burned and the original patterns were destroyed. The Spring Garden engine, a few years afterwards, was broken up and the Morris engine at Lowell was left, the only one of its type in existence. Later, when the consumption of water exceeded all expectation and a protection against possible breakdown was required, a Worthington engine was added to the equipment.

For storage of the water filtered and pumped under this system a reservoir was built on the top of Christian Hill. This stone-lined



1. CHARLES W. MORREY SCHOOL.
2. BARTLETT GRAMMAR SCHOOL.
3. ABRAHAM LINCOLN SCHOOL.

basin covered with its embankments and approaches covers a little more than fifteen acres. The reservoir basin proper was 520 feet long by 510 feet wide. It had a depth of twenty-four feet at high-water mark, which was four feet below the top of the embankment. The high-water surface was 181.5 feet above datum (that is, about thirty-two feet below the top of Pawtucket dam).

The reservoir contained 30,000,000 gallons when filled to capacity, or enough to supply one hundred thousand people for one week. Its height proved to be sufficient to serve every part of the city except some hilltop sections of Centralville and Belvidere. To take care of these, a second high service reservoir was constructed in 1881 on the hill above the original reservoir. This reservoir, at an elevation of 253.5 feet has a capacity of 1,500,000 gallons.

The difficulty of thorough filtration of Merrimack river water increased as population grew in the valley. By the middle eighties the river over long stretches had taken on the aspect and odor of an open sewer. The volume of trade wastes which it carried was steadily mounting. No scientifically approved disposition of sewage was in sight. Dumps, such as those at Manchester and near Little Canada in Lowell, did not add to the wholesomeness of the river. In 1890 an epidemic of typhoid in Lowell and Lawrence was traced to a source of infections not five miles above the former city.

Geologists in the meantime had emphasized the fact that the real flow of a river basin is often much greater than the stream which follows a thread through its lowest portion; that there may be a continual seepage of water downward through the subsoil and through permeable strata of rock. By finding an area where there is a considerable concentration of this subterranean water it is sometimes possible to secure a supply sufficient for the uses of a large community. Such an area was finally found in the broad interval on the north side of the Merrimack, where Edward Colburn and Samuel Varnum first occupied lands in the town of Dracut. Here, in 1892, were put down the Andrew wells, ninety-one in number, which in a single year furnished nearly nine hundred million gallons of pure cold water. George Bowers, a descendant of Jerathmeel Bowers, one of the original settlers of Middlesex village, was city engineer during the installation of the driven well system. He was born in Lowell in 1848 and educated in the public schools and at the Massachusetts Institute of Technology. He entered the office of the city engineer in 1868. To his faith and enterprise, in largest measure, was due Lowell's possession of the inestimable advantage of safe and agreeable water.

Schools in the Seventies and Eighties—Lowell public schools in the epoch under our review arrived at a standing among the schools of Massachusetts and of the Nation such as they had not had before

The high school, in especial, under the principalship of Charles C. Chase and his successor, Frank F. Coburn, became famous for the thoroughness with which it prepared boys and girls for college and for the soundness of the instruction given those who followed the so-called English course. At a time when Harvard College was taking the lead among American institutions of higher education in at once broadening and intensifying requirements for admission the Lowell High School kept up with the most exacting of expectations. The record of youths who passed the Harvard examinations with credit, often for the purpose of entering other colleges, became fairly surprising to the "office" at Cambridge.

Merely the fact of living up to the new Harvard requirements with their inclusion of courses in science and the modern languages meant that the high school must broaden its plan of instruction so that in all departments, science as well as the classics, laboratory as well as text-book methods must be used. The well equipped chemical and physical laboratories to the rear of the historic building in Kirk street gave many boys and girls their first real understanding of scientific method. There was to be sure one patent defect in the high school of the seventies and eighties which has since been remedied: the lack of adequate provision for instruction of young people whose primary capacity was mechanical; who in language of present-day psychology were "motor minded." These mentalities now have admirable facilities which were then wanting for manual training. Otherwise, so far as the great classes of "eye minded" and "ear-minded" boys and girls were concerned, it was nearly an ideal school, and fortunate was the youth who during his impressionable years received the best part of his education within its walls.

Not only was the high school curriculum good, in the main, but the body of teachers was far superior to the technical methods of the courses which they taught. At the risk of seeming personal in singling out one period for tribute to a particular corps of instructors, it is perhaps fair to contend that rarely in any school has a group of more inspiring teachers been brought together than in the Lowell High School of the eighties and early nineties. The principal, the late Mr. Coburn, was not only a trained scientist with a gift for imparting his subjects, but a disciplinarian of such natural dignity as never to need to resort to violent or repressive measures. His look of quiet reproval was more effective than any other teacher's display of temper.

His submaster, Frank B. Sherburne, whose tragic death in a later era brought widespread sorrow, was one of the most efficient classical masters of his time. The fluency with which his pupils read their Latin and Greek used to astonish freshmen from other preparatory



4. WASHINGTON SCHOOL.
5. GREENHALGE SCHOOL.
6. MOODY SCHOOL.

schools where the customary fumbling and stumbling was tolerated. "Bunny," as Mr. Sherburne was affectionately called, was a teacher with marked capacity for having "something doing every minute" in his classes. The droning sleepiness of the average classical lecture room was quite absent from his bailliwick, and the alertness of his recitations undoubtedly had an effect in "speeding up" the manner of teaching of younger people when they were elected to classrooms at the school.

The mathematical and English teaching of Miss Mary A. Webster was not less effective in making the Lowell High School one of the best preparatory schools in the country. During a long service Miss Webster earned the gratitude of every earnest boy and girl who came into one of her classes by her patient insistence on clearness and simplicity of demonstration. Her own grasp on the subjects she taught was impeccable, and she was almost preternaturally quick to discover whether a pupil really understood or was only trying to "bluff through."

About 1885 there came to the high school a young man who looked so young that he was frequently mistaken for one of the students. This was the late principal, Cyrus Irish, just graduated from Harvard, where he had specialized in scientific subjects. He was, like Mr. Coburn, an enthusiastic advocate of the laboratory method of teaching and he made chemistry fascinating to every youth who took it up.

So one might go on enumerating the whole list of really remarkable teachers of the decade in which the Lowell school first lived closely up to the ideal that President Eliot had set for the secondary schools of the country. Out of the discordant situation which Mr. Chase experienced in the first years of his principalship, when the female half of the school was under a separate jurisdiction, he succeeded before his retirement in creating a fine unified loyal corps of teachers and a quite wonderful school spirit. This condition was handed on to his successor. The spirit is by no means extinct.

An element that affected most of the community very favorably was introduced in 1881 when military drill was made compulsory for high school boys. The hall in the historic market building in Market street was long used as a drill hall. The exhibitions and field days of the battalion did much to advertise the institutions. The efficiency of the drill as imparted by Captain Hanscom was such as to place the Lowell high well up among the leading military schools of the State. The instruction undoubtedly gave many boys a decided "slant" toward a military or naval career. In 1889 courses of "calisthenics" or physical culture for girls were introduced.

The grammar schools in this period were likewise undergoing

continual improvement. Under progressive school boards the curriculum was enriched, as it should be in any well ordered system of instruction for children, who are incapable of intensive application upon a few subjects and whose energy is best spread over many subjects, well taught. The music instruction under George F. Willey, who served as special teacher, and who appeared once a week with accordeon and pitch pipe, was of a very good grade. A step was taken toward recognition of the claims of the manual arts when drawing was introduced about 1875. The first instruction, based on South Kensington models, was rather hard and mechanical, but not altogether unadapted to the conditions of a textile city. The annual exhibitions in Huntington Hall brought forth much work of decided merit. In the "three R's" the instruction was that of the period: the arithmetic liable to be over the heads of all but the better mentalities of the class; the handwriting mechanical rather than calligraphic; the spelling following analytical rather than synthetical methods. The various subjects, nevertheless, were taught by teachers drawn from the best elements of the community. It was a privilege for the boy or girl, whether of humble or fortunate parentage, to be under their influence from the crude little primary schools that still survived from earlier days through the five grammar grades and into the high school.

Public services, privately administered began to assume a new importance in Lowell as electric lighting, electric traction and the telephone came into prominence.

From Horse Cars to the Trolley System—Expansion of street car transportation which was destined radically to alter the life of the community after electrification became general, had already begun before the success of the trolley car experiment at Richmond, Virginia, was assured. Up to 1886 the Lowell Horse Railroad Company had a monopoly of the local transportation. Their horse cars, with the floors covered with straw in winter, jogged over a few lines radiating from the old post office in the Hildreth building. In addition to the original Belvidere-Pawtucket street, Gorham street and Middlesex street lines, the company had made extensions on Westford and Chelmsford streets and on Broadway. The service was good of its kind; most people lived so near the business centre as not to be absolutely dependent on it.

Competition appeared in 1886 when the Lowell and Dracut Street Railway Company was organized under articles of association with a capital of fifteen thousand dollars. The proposal to build tracks through Lakeview avenue on the Centralville side of the river to Dracut navy yard met with some opposition, but was successfully carried through. The rails were laid on Bridge street and presently the cars were permitted to cross the river.

In 1887 the Lowell and Dracut company was incorporated with an authorized capital of \$100,000, which was all subscribed within the year. The promoters of this enterprise were among the first in the American street railway world to plan to take advantage of electric traction. In 1888 a little group of Boston capitalists went down to Richmond and there saw Frank J. Sprague's trolley cars buzz out of the car barns, climb steep grades and thread their way through crowded streets. Steps were at once taken which made Boston the first large city to introduce the new system. These developments were closely watched in Lowell, and in 1889 bonds were issued for the purpose of furnishing an electrical equipment for the line that was already in process of extension to the Dracut shore of Tyng's pond.

To finance this and other innovations the Lowell & Dracut Company in March, 1890, was authorized to issue further stock to the amount of \$100,000. It then had routes running from Post Office square to Pawtucketville, to Fort Hill Park, to the Lowell cemetery and into the Highlands, making in all about thirteen and one-half miles of track.

The social effect of this spreading of transportation lines was already beginning to be felt by the opening of the Chicago Exposition. An outlet was provided from the congested central parts of the city. Working class homes began to be built in districts which heretofore, though within the city limits, had remained consistently rural, inhabited chiefly by families engaged in farming or sufficiently well to do to travel back and forth from downtown Lowell by buggy.

In looking back it is seen to have been regrettable that this diffusion of population due to the new form of transportation was not more intelligently guided. In the succeeding years neighborhoods of much esthetic charm, inherited from days of sound solid construction, have been hurt by an influx of flimsy, jerry-built houses, placed without order or logical arrangement. A commission on city planning in 1890 might have saved much of the reproach of the present appearance of large sections of Lowell suburbs. It might have succeeded in establishing types of suburban dwellings which, if cheap, should at least not be offensively so. The unrestricted individualism that has injured Middlesex village, Pawtucketville and Dracut Centre might have been so modified that old and new in these naturally agreeable communities would have been perfectly consistent, and both good of their kind.

To the families of operatives, at all events, it was a distinct blessing when cheaper and quicker transportation made it possible for the worker to live at some distance from the factory, to have a little garden, to enjoy the benefits of sunlight and pure air. The areas of congestion have never been depopulated, for always there have been new-

comers to whom to rent the oldest and most unsanitary of tenements. Chance, nevertheless, has been afforded to the worker as he has become settled in the industrial community to acquire his own home.

The ancient bailliwick of the Hildreths, lying between Centralville and the navy yard, was one of the first districts to feel the impulse toward workingmen's homes. Even before the coming of the Lowell and Dracut street railway the opening of the Aiken street bridge in 1883 resulted in the construction of a sort of annex to Little Canada on the north side of the river. After the arrival of the electric cars growth of streets and houses was rapid over these pleasant acres.

Expressed statistically, while the population of Lowell was increasing thirty-one per cent. the number of dwelling houses grew forty-one per cent. From 1880 to 1885 the population increased seven per cent.; street railway facilities in the same time, twenty per cent. From 1885 to 1895 the increase of population was twenty-two per cent.; of traction facilities, four hundred per cent. A "greater Lowell" was thus made not only possible but inevitable.

Credit for the initiation of this street railway expansion undoubtedly belongs to John Ames, of Dracut, born in 1821, a carriage-maker by training and for many years in the real estate business in Lowell. As projector of the original line from Merrimack square to the navy yard he was elected first president of the new company. Failing health caused his resignation. He was succeeded by August Fels, born in the Austrian Tyrol in 1844, trained in textile manufacturing in New York and New Jersey and from 1877 onward, connected with the historic woolen manufacture at Dracut. Mr. Fels continued in the presidency of the company for three years, resigning when a consolidation with the Lowell Horse Railway Company took place and the Lowell & Suburban Street Railway Company became the dominating factor in the traction situation.

The Meigs Memorial—A reception was arranged, rather prematurely as it turned out, June 12, 1890, to congratulate Captain J. V. Meigs on the "success" of his elevated railway scheme, which then seemed certain to be adopted in Boston. The doughty captain's victory was seen, a few days later, to be pyrrhic; the organized investment forces of the Hub, already committed to a more conventional type of overhead transportation, decided to give the Lowell inventor his *coup de grace*. On July 2 following, the West End elevated railway bill passed the Massachusetts House by a vote of 92 to 72, and it was evident to the initiated that the long struggle for adoption of the Meigs monorail system had ended disastrously. As late as April 11, 1894, however, Captain Meigs was still trying to demonstrate the feasibility of his elevated road for use in the Hub.

Judgment on a technical matter such as that of the relative merits

of an overhead monorail and a three-rail elevated railway of the sort finally adopted in Boston cannot be given by a layman. The Lowell man's system, as it was operated experimentally for a time on a miniature track in East Cambridge, looked fascinatingly simple, logical, safe and simple. Either, however, it contained insuperable defects or American street railway enterprise has been less alert to opportunities than sometimes supposed. Not only was the scheme rejected in Boston (possibly, as was then charged, with an accompaniment of bribery), but none of the cities more recently outfitted with rapid transit has adopted it. That the monorail has possibilities of extremely rapid and efficient transportation has been shown by the Elberfeld-Barmen line in Germany, differing from the Meigs plan in that the cars are swung from the single rail instead of being supported above it.

Captain Meigs, whose inventions interested many of his fellow-citizens, was a native of Tennessee, of Connecticut ancestry, who espoused the loyal cause during the Civil War. He was commissioned by President Lincoln to raise the first negro battery, which he successfully brought together at Nashville. After the war he was desirous of continuing a career as inventor which he had begun in the shops of the Memphis & Charleston railroad, and through his acquaintance with General B. F. Butler he was led to settle in Lowell.

One of the periodic revivals of interest in a possible reconstruction of the old Middlesex canal occurred in the winter and spring of 1890. A petition for reopening the waterway reached the Legislature. John R. Freeman, a well-known engineer of the Massachusetts Institute of Technology, testified against the plan, urging that it was impracticable for want of water. His position was corroborated by Frederick S. Clark, head of the Talbot Mills, North Billerica, and Major Charles A. Stott, representing the Lowell mills using Concord river water, who asserted that diminution of their power would be far more to the detriment of the Commonwealth than any possible use of the canal could be to its advantage. Their objection prevailed. Since then occasional letters advocating coal carriage through the Middlesex canal have appeared in the public prints, but no large organized effort in this direction has been made.

Lowell as a Telephone Centre—On April 25, 1877, Professor Alexander Graham Bell, of Boston, delivered a lecture and exhibition in Huntington Hall. Then was shown in Lowell for the first time the telephone, destined to enrich so many of its citizens who had sufficient imagination to foresee its immense possibilities. The eminent inventor, still struggling, literally, to gain a hearing for his instrument, was introduced by Rev. Dr. J. M. Greene. After his explanation of the aspects of his scientific "toy," four telephones, which had been in-

stalled in the hall, were connected with the telegraph lines to Boston and in due course of time the office of the professor in Boston was called and to their astonishment the Lowell people clustered around them heard clearly several airs played on a concert organ twenty-five miles way.

This memorable lecture was given in Lowell, it may be noted, only a little more than a year after Dr. Bell had uttered to his assistant, Thomas A. Watson, the first words ever transmitted by telephone. The demonstration proved to be intensely interesting. It prepared the way for the active participation of many Lowell men in the development of one of the world's greatest public utilities.

Just when the telephone was first used practically in Lowell is still a matter of some dispute. It was claimed by William H. Bent, who took part in the formation of several early telephone companies, that the Pioneer Telephone Company, doing business between Boston and Lowell, made the first installations. The first record, however, of a petition for leave to erect wires on buildings and poles for construction of a telephone system in Lowell came from the New England Telephone Company under date of March 12, 1878. It was signed by Charles J. Glidden. A committee of the common council consisting of Horace R. Barker, George F. Scribner, Charles H. Harvey, Robert Goulding and Samuel D. Butterworth reported in favor of the petition, which was granted.

Prior to the creation of the long distance telephone, small units of organization were the rule. Among the many telephone companies that were started in the first years of the telephone, Lowell capitalists took a distinguished and highly profitable part. Among those concerned in the first promotions were William A. Ingham, Charles J. Glidden, Alonzo A. Coburn, Loren N. Downs and William H. Bent.

Dr. Moses Greeley Parker, and, by his advice, Frederick Ayer became large holders of telephone securities, the former emerging in 1886 as managing director of the New England company, which had absorbed several other companies of the four northern States of New England.

The chief local service at the outset was that rendered by the Lowell District Telephone Company, organized in 1879 with a capital of \$15,000. In 1880 this company had about 500 stations in Lowell. The central office was then at Room 12, Shattuck block. Mr. Ingham was president; Mr. Glidden treasurer and manager. The company in 1880 was combined with a Worcester company and later with the National Bell Company of Maine under the name of the Lowell District Telephone Company, with a capital stock of \$1,500,000. Three years later a consolidation of the National Bell of Maine, the Granite



1. CORPORATION HOSPITAL.
2. LOWELL GENERAL HOSPITAL.
3. ST. JOHN'S HOSPITAL.

State, Suburban and Lowell District companies gave the present New England Telephone Company, capitalized at \$12,000,000.

To attempt to follow the financial manipulations by which these combinations were achieved and larger and larger issues of stock floated belongs to the historian of the telephone utility rather than of Lowell. The operations produced a new crop of millionaires in a city whose fortunes up to this time had been created mainly through manufacturing enterprises of one kind and another. As control of the telephone in New England passed into the hands of the "State Street crowd" in Boston, some of the Lowell investors went further afield and placed their money with the Erie Telephone and Telegraph Company, which for several years had its headquarters in Lowell. It covered territory in Ohio, Texas, Arkansas, Minnesota and the Dakotas. It was finally absorbed by the Bell companies.

Multiplication of charitable and philanthropic institutions was normally to be expected in Lowell as fortunes were amassed and a sense of obligation toward the unfortunate was developed among the comfortably placed. Before the war, as has been seen, a humanitarian spirit was well aroused. This expressed itself from 1865 onward in ever widening circles of beneficence.

The First Years of St. John's Hospital—On March 27, 1867, the Legislature passed an act empowering Anne Alexes Short, Anne Aloysia Reed, Emerentiana Bowden, Anne Vincent McCloskey, Blandina Davaux, Mary Frances Quirk and Mary Oswald Spalding and their successors to form a corporation by the name of St. John's Hospital "for the purpose of maintaining a hospital in the city of Lowell for the sick and disabled." This act was signed three days later by Governor Alexander Bullock. In the preceding autumn these Sisters of Charity had bought the Old Yellow House, whose story has already been told. In 1868 St. John's Hospital was completed and opened for its beneficent work. As one of the early reports stated: "Its doors are always open to cases where individuals are suddenly struck down or injured by accidents in the mills, or on the railroad or by other means." On the staff of this hospital many of the foremost physicians of Lowell have given devoted service year after year; to its funds citizens have subscribed, regardless of considerations of religious belief.

A certain deterioration of public health which was expressed in the death rates of the eighties was somewhat facetiously attributed in a mayoral inaugural to steadily increasing expenditures upon the work of the board of health. The real explanation, of course, was more complex, though it lay in easily observed facts. The older generation of citizens, born and bred in the country, was dying off and relatively fewer of the same stock was coming to Lowell. Of the

younger generation of native Americans born in the city, after their school days many of the most robust and enterprising went West or to New York City to settle; those who remained in Lowell were perhaps not always of greatest physical stamina. The working class population was more and more composed of newcomers of the European peasant classes, laboring for small compensation and ignorant of ways of right living in tenement houses which in and for themselves yearly become more decrepit and worse infected with the tuberculosis of preceding generations. Alcoholism was not less prevalent than it had been earlier and science had not yet joined with religion in effective work against it. The deferred effects of diseases due to other immorality of the sort which accounts for the deaths of one man in nine and one woman in thirty between the ages of thirty-five and fifty-five, were as yet little realized, even though Ibsen was even then writing "Ghosts." Certain apparently minor atrocities almost universally practiced at the time by women must have contributed to mortality and sickness lists. It was the day of tight lacing and the bustle.

These, to epitomize, were the death ratios per thousand of population that gave alarm: 1885, 20.70; 1886, 23.27; 1887, 24.96; 1888, 24.51; 1889, 25.31; 1890, 25.24.

Donations Toward a Lowell General Hospital—The need of a large free hospital of modern type which had long been felt in Lowell, was supplied at this juncture by the incorporation and endowment of the Lowell General Hospital.

In the autumn of 1891 it was reported that James K. Fellows, one of the older residents of the city, who had laid the foundations of an ample fortune in the jewelry business, had generously agreed to buy Samuel Fay's former residence on Varnum avenue in Pawtucketville to be used as a general free hospital. The appropriateness of the site for such a purpose was indubitable, for the large brick mansion, on a swell of land between Flag Meadow and Clay Pit brooks, had long been one of the most conspicuous in the neighborhood. To the rear was a healthful pine grove and beyond that the most heavily wooded region in the Lowell district. The exposure to westerly and southerly winds insured good air at all seasons and especially in summer. The site was recognized as practically ideal and there was widespread appreciation of Mr. Fellows' munificence. Mainly through the initial efforts of Dr. Lorenzo S. Fox, a hospital association had already been formed of which former Mayor Charles D. Palmer was president; Rev. A. St. John Chambre, vice-president.

The rumor of such a gift was substantiated. On October 13, 1891, the officers of the new association received from Mr. Fellows the following letter, a model of precision as well as practical philanthropy:

Lowell, Oct. 13th, 1891.

To the trustees of the Lowell General Hospital:

The lack of a public hospital in our city has long been so obvious as to excite much comment. The institutions that at all approach that character, while doing a good work, are yet far from meeting the existing need of our community, besides which they are under private management. With the object of promoting the movement to establish a public hospital for our city I have acquired title to the estate of the late Samuel Fay, situated in the part of Lowell known as Pawtucketville, and I take great pleasure in herewith transferring to your corporation the title to this property for use in accordance with the defined object of your organization, but with the understanding and explanation on my part that your board of trustees will raise a fund equal in amount to at least twice the value of the estate conveyed, the income of which fund shall be applied to the maintenance of this hospital for the relief of suffering humanity in Lowell and vicinity.

It seems proper for me to stipulate that the property thus deeded (being now free) shall at no time be encumbered by any debt and that the building shall be kept well insured. It is also my desire that you and your successors shall constantly keep at least one woman on the staff of attending physicians, and that in recognition of this gift you will exclude from said staff any physicians who habitually prescribe alcoholic stimulants, believing as I do, that their use is unwise, unscientific and therefore should be discouraged.

That this hospital may be speedily found in operation and prove an enduring blessing for the relief of human suffering is my most earnest desire.

Sincerely yours,

JAMES K. FELLOWS.

This letter was duly engrossed and framed by the trustees of the new Lowell General Hospital.

Following this gift of an estate which, according to a current estimate, represented an expenditure of about \$30,000, efforts were continuous for several years to build up an endowment. The first bed to be endowed was one for which Major C. A. Stott contributed \$5,000 in honor of his wife, Lizzie A. Stott. The Lowell dispensary, the founding of which under Mr. Carney's initiative has already been noted, gave \$15,000 to found three free beds. Other gifts followed until at a later date Frederick Fanning Ayer's generosity placed the institution upon its present firm financial foundation.

Inauguration of Several Humanitarian Institutions—The Old Ladies' Home, a monument to the efforts of Mrs. William North and other philanthropic women, was organized in July, 1867, with Mrs. George Hedrick as president and Dr. William Bass as physician. By means of subscriptions and a fair, money was raised to buy a house in Moody street, which was occupied for several years. In 1882 the association took possession of the present specially designed home in Fletcher street, which has accommodations for twenty-four deserving

old women. The institution has been supported mainly by annual fairs and gifts from friends.

Orphans have been cared for for years past at the Theodore Edson Orphanage, No. 13 Anne street. This orphanage, non-sectarian in character and supported in part by contributions from St. Anne's parish and in part by donations from the general public, was started in 1875 by Rev. Dr. Theodore Edson, under the style of St. Mary's Orphanage. The name was changed upon the founder's death in 1884, to The Theodore Edson Orphanage.

The historic Old Stone House, a landmark in Pawtucket street from the inception of the town of Lowell, in October, 1892, was conveyed, through the generosity of Mrs. Josephine Ayer, of Paris, and her son Frederick Fanning Ayer, of New York City, to one of the city's finest charities, the "Home for Young Women and Children," which had been organized in 1876. The purpose of this institution, henceforth known as the Ayer Home for Young Women and Children, is to provide a temporary home at moderate expense, to assist in finding employment and otherwise to help in the adjustment of family relations. It is likewise a home for unfortunate and destitute children who, on account of the loss of both parents or one, are left helpless and uncared for. The original officers were: President, J. K. Chase; vice-presidents, Mrs. D. S. Richardson, Mrs. E. D. Burke; clerk, Mrs. E. B. Adams; treasurer, Thomas Nesmith; auditor, Levi Sprague; physician, Dr. F. A. Warner; directors, Mrs. J. K. Chase, Mrs. D. S. Richardson, Mrs. E. D. Burke, Mrs. David Gove, Mrs. Robert Wood, Mrs. W. C. Avery, Mrs. A. L. Richmond, Mrs. E. B. Adams, Levi Sprague, Francis Jewett, Horace J. Adams, Jeremiah Clark, A. G. Cumnock, W. G. Ward.

Mrs. Ayer, who thus became one of Lowell's chief benefactors, lived in Paris for many years after the death of her husband, Dr. J. C. Ayer. She was a daughter of Royal Southwick. Her *menagé*, in the stately mansion formerly occupied by the Duchesse de Moudry, *née* Princesse Murat, on the Esplanade des Invalides, was described by Mary Bacon Ford in the "Cosmopolitan Magazine" for April, 1893. Mrs. Ayer was one of the first Americans to form an extensive collection of works by the modern French school of painters. To her timely help, it is well understood, the American Art Association owed its existence during its first struggling years. She died in 1897.

A branch of the Women's Christian Temperance Union was organized in Lowell, February 17, 1875.

The Father Matthew Temperance Institute, which has exerted much influence toward sobriety among young men of Irish lineage, was formed in Lowell, January 1, 1882, in response to a call issued by Florence V. H. Donoghue and P. F. Sullivan, later president of the

Bay State Street Railway Company. This association within a few years became one of the largest and strongest of its kind anywhere.

The Channing fraternity was added to the list of Lowell philanthropies on May 24, 1871. As the name indicates, it is a Unitarian organization, designed to aid the worthy poor; to provide for religious meetings in public places and to institute courses of improving lectures. The fraternity was incorporated in 1884 with the following incorporators: Rev. Josiah Lafayette Seward, Benjamin Gamage Franklin, George Reed Richardson, Edward Kirk Perley, Walter U. Lawson, Ralph Fletcher Brazer, Helen Augusta Whittier, Martha Coburn. The work of the fraternity has consisted of Sunday evening meetings in the Unitarian church and elsewhere; of lectures, concerts and occasional theatrical entertainments.

The People's Club, an organization making for social enjoyment under democratic conditions, had its origin in the spring of 1872. What this association has accomplished for men and women who for one reason and another could not belong to an expensive club has been of incalculable social worth. To Lowell, throughout its history, young people of good training and decent tastes have come as strangers, uncertain whether how long they will remain; often for one reason or another averse to forming close affiliations with distinctively religious bodies. For such the People's Club has provided opportunities for quiet reading and study and for harmless amusements. It organized a well appointed reading room, supplied with many magazines and newspapers, long before the Public Library was so provided. The checker and chess tournaments conducted at the rooms in the Nesmith building were among the innocent and gentle diversions of scores of promising youths of the seventies and eighties.

A plan for a club of this character was first broached at a public meeting of March 12, 1872, in Mechanics' Hall, at which Captain G. V. Fox was chairman, and Dr. F. M. Nickerson secretary. It was decided to organize a "social union" for the following purpose: "Its objects shall be to promote a place of resort in the City of Lowell to which all shall be freely invited who are in need of amusement and recreation for leisure hours and the influences of social companionship and home life." At a later meeting the name of "People's Club" was adopted. The first officers were: President, Captain G. V. Fox; vice-president, John A. Buttrick, George F. Richardson; executive committee, the foregoing and John F. McEvoy, J. H. Sawyer, Mrs. C. P. Talbot, Mrs. Horatio Wood, Mrs. Frederick Ayer, Mrs. David Gove; treasurer, ———; assistant treasurer, Miss Maria Swan; secretary, James Watson; assistant secretary, Miss E. O. Robbins.

The mainstay of the People's Club was the untiring devotion of the Rev. Horatio Wood. Having perceived that the club was filling a

real need, especially among young unmarried men, this clergyman undertook the responsibility of seeing that the experiment did not fail for want of advocacy and supervision. From 1876 until his health broke down about ten years later he was most assiduous in attendance at all meetings, in organizing entertainments, in soliciting funds. After he was no longer able to continue his labors his associates in one of the club's annual reports paid a well deserved tribute to his efforts. Of the very practical character of his services they wrote: "For years he collected all the funds outside of the sum annually contributed by the corporations. * * * He had entire charge of the libraries, buying every book placed upon the shelves and choosing them with great care and skill for the readers for whom they were intended. He also engaged every lecturer, going to Boston often for those personal interviews which he thought far beyond the force of any correspondence to explain to them the purposes of the club and to fix the engagements."

The People's Club at the outset was formed for the benefit of men members. Soon, however, it was seen that a class of women employed in the city would appreciate its advantages and a women's branch was formed, with headquarters in the Wyman's Exchange building.

Mr. Wood's services in the interest of the People's Club, as of many other humanitarian enterprises in Lowell, were not forgotten after his death. In July, 1893, a tablet in his memory was placed on the walls of the free Chapel of the Ministry-at-large in Lowell. It bears this inscription, written by Dr. Andrew P. Peabody, of Harvard University: "To the memory of Rev. Horatio Wood, who by 24 years of wise, faithful and self-denying service, placed the ministry-at-large in Lowell on a firm foundation and won for himself the honor, gratitude and love of our whole community." Mr. Wood died in Lowell, May 12, 1891, aged eighty-four years.

Among other charitable organizations of the city owing their inception to this period are the Day Nursery, started in 1885, the Dorcastrian Association, Faith Home, St. Peter's Orphan Asylum, the Holy Name Society of St. Patrick's Church, Massachusetts Society for Prevention of Cruelty to Children, L'Union St. Joseph de Lowell.

The multiplication of charitable agencies, with many possibilities of duplicated effort, resulted in the formation, May 6, 1881, of the Associated Charities of Lowell. The stated object of this organization, which conforms to a type familiar to many cities, is to "give proper direction to the charities of the benevolent; to aid in discriminating between the deserving poor and the fraudulent; and to secure justice in the proper distribution of the contributions in aid of the suffering."

The history of most Lowell churches from 1865 to 1893 was one of

continuance rather than of marked increase in activities. Several new churches were organized in the Highlands district of the city. This was the era in which the Church of the Immaculate Conception, within surrounding landscape development, became a landmark of Belvidere.

Particularly among the older Protestant churches there was a forewarning of the struggle for existence which has been very evident in the present century. Without necessarily any considerable diminution of natural religiosity in the population, it is unquestionable that habits of church going became less *de rigueur* toward the latter end of this period than they had been at first.

Efforts, naturally, were made by devoted clergy and laymen to stay this tendency. It certainly progressed less rapidly in Lowell than in many other American cities.

A notable instance of a church's working against an apparently inevitable tendency came into prominence when the free church movement, much in evidence in Boston about 1890, was brought to the consideration of Lowell people in 1892. The future of John Street Congregational Church at this date was already very dubious. This stronghold of orthodoxy, which in the middle nineteenth century had been one of the really great churches of New England, was steadily losing attendance, after the fashion of many downtown churches, as the native American population more and more tended to move into the suburbs, or sometimes to drop all church connections. The church was obviously situated too close to Kirk street and to the First Church. Even the brilliant pastorate of Rev. Henry T. Rose failed to stay the decline, and in January, 1892, when Mr. Rose, having been called to the pastorate of the First Congregational Church of Northampton and being minded to accept, tendered his resignation, his letter contained the statement: "About 50 years ago the John Street church was a very prosperous organization; its seats were all rented and were filled; its Sunday school was large. Then its constituency was all, or nearly all, drawn from within a radius of half a mile from its doors." Mr. Rose's resignation was reluctantly accepted and a committee appointed to consider and report on the free church plan, as developed by Rev. C. A. Dickinson, formerly of Lowell, at Berkeley Temple, Boston. This committee, consisting of Frank Coburn, N. G. Lamson and Dr. W. H. Lathrop, visited Mr. Dickinson's experiment in Boston, and to the disappointment of some members of the church, made rather a lukewarm report regarding the probability that such success as it was having could be duplicated in Lowell. The subsequent decline of Berkeley Temple among the churches of Boston may be taken as justifying this committee in their belief that Lowell offered too limited a field for a church of this character.

Lowell's First Collegiate Institution—A movement to convert French-Canadians of Lowell and other New England cities to Protestantism gained some impetus and for several years excited much interest among Americans of English ancestry.

In 1878 a French Protestant Society of seven members was formed in the city by the Rev. T. G. A. Cote, who took a residence on Arlington street in a native American neighborhood, and who soon impressed local Congregationalists and others with his ability and sincerity. The little congregation at first worshipped in a rented hall. As it grew in numbers a church building fund was started. In October, 1881, the society held services for the first time in the plain stone church, still standing at the corner of Fletcher and Bowers street. In 1885 a jubilee was celebrated to commemorate the extinction of the last dollar of indebtedness. Mr. Cote, in the meantime, had been chosen general missionary among the French-Canadians of Massachusetts and had been succeeded in his pastorate by the Rev. Calvin E. Amaron, B. D.

In a little publication entitled "The Evangelization of the French-Canadians of New England," Mr. Amaron proposed that steps be taken to found a French Protestant College, to be conducted in Lowell. Cordial approval of his proposal was offered by several of the local ministers. The college was duly opened in rented quarters in October, 1886, with sixteen pupils. During the first year the attendance increased to twenty-five and would have gone to at least forty had accommodations been available. The officers of the college at its inception were: President, J. M. Greene, D. D.; clerk, Rev. C. A. Dickinson; treasurer, George A. Hanscom; executive committee, Rev. Owen Street, D. D., Rev. C. E. Amaron, B. D., Rev. C. H. Willcox, Martin L. Hamblet.

In the second year of the French Protestant College some fifty-one boys and young men sought admission. During this school year the trustees entertained an offer of a gift of land at Springfield, on condition that the institution be moved to that city. Certain manual training advantages, much needed for the class of students attracted by this college, were accessible in Springfield and were at the time lacking in Lowell. In the third year, therefore, the new college was moved from its birthplace. Its subsequent history belongs to that of the city of Springfield.

Social Aspects of Lowell's Late Nineteenth Century—Socially considered, Lowell of the later decades of the nineteenth century was still a pleasant place to live in. There was a constant and healthy infusion of new elements of population, due to the frequency with which manufacturers and executives came to Lowell from elsewhere—from other American cities and often from Great Britain. The fami-

lies of these newcomers helped to prevent the unfortunate condition in which everybody in a community is a cousin to everybody else.

The geographical layout of the city was, and is, somewhat conducive to social diversity. Belvidere, the Highlands, Centralville, Pawtucketville and Middlesex have tended each to develop its own traditions and customs. The early rivalry between Belvidere and Pawtucket streets as a place of residence of the wealthiest families was visibly disappearing by 1890; Pawtucket street, historically the oldest and most aristocratic section of the city, had been hopelessly distanced by Belvidere.

The Yorick and Highland Clubs—Ambition to emulate the larger cities in club life may have helped to bring into being two of the most ambitious new social projects of this period of Lowell history, the Yorick Club and the Highland Club.

The Highland Club was dedicated February 6, 1892. This structure was designed by Messrs. Stickney and Austin for situation on a tract of 90,000 feet of land on Harvard and Princeton streets. The dedicatory exercises were thoroughly impressive. They were in charge of a committee consisting of Colonel J. W. Bennett, chairman; Orrin B. Ranlett, C. C. Streeter, Charles W. Wilder, C. W. Pierce. The chairmen of other committees were: Reception, William E. Livingston; decorations, E. S. Hylan; music, D. E. Dwelly; costumes, Fred Horne; supper, Frank H. Haynes; billiards, C. Arthur Abbott; carriages, J. S. Hanson; doorkeeper, George W. Dearborn.

A club, for "clubable men," of a sort familiar in the larger cities, first took form in Lowell in the eighties. The Yorick Club, at which in these later years a male visitor to the city is reasonably sure to be entertained, dates from a meeting held November 11, 1882, at the home of Joseph A. Nesmith, the purpose stated in the call being to organize "a young men's social club." At this and at a subsequent meeting at the home of George Richardson the club was definitely formed. A room was hired in Wyman's Exchange. The club began with a membership of twenty and the following officers: President, Percy Parker; secretary, Frederick W. Stickney; treasurer, Frederick A. Chase; directors, George R. Richardson and Walter M. Lancaster. The other members of the club were: Joseph A. Nesmith, James E. Nesmith, George S. Motley, Theodore E. Parker, Jr., Walter U. Lawson, Paul Butler, Samuel E. Stott, Charles H. Hooke, Harry V. Huse, Edward Ellingwood, Herbert P. Jefferson, Frederick C. Church, Gerard Bement, Harry A. Brown, Frank W. Howe. The name of "Yorick Club" was adopted May 19, 1883.

The Yorick Club continued for some years to occupy rented quarters; after May, 1883, in the then new Post Office building in Merri-mack square; then in Room 42, Hildreth building, and beginning July

1, 1885, in a suite of rooms in the Mansur building, Central street. The apartments last named served the club for sixteen years. Finally, after a fire which swept the rooms in the Mansur building in June, 1900, action was taken toward securing the present club house, a three-story brick house built by the Merrimack Manufacturing Company for occupancy by some of its high officials. This house was bought, altered and furnished at a cost of about \$60,000 and was occupied for the first time on the evening of July 22, 1901.

Deterioration of Huntington Hall—The safety of historic Huntington Hall, over the old Boston and Lowell "depot," began to be seriously questioned in March, 1892, after a bazaar for the benefit of St. John's Hospital, in which considerable sagging of the floor was recorded. J. Frank Page recalled that in 1856, when Rufus Choate spoke in Lowell, the hall settled in the middle "about an inch, but it seemed to us as if it were ten feet." At that time there was a public scare, but Mr. Page's father, Jonathan Page, was engaged to bolster the floor with two iron trusses and after that no more alarm was felt. The 1892 incident presaged the day when this famous hall, with which so much of the communal life of the city had been connected, must be abolished in the name of public safety.

The Era of Intensive Athletics—Outdoor sports had an extraordinary expansion in Lowell after the Civil War—one to which at least suggestive reference should be made. This was the period in which baseball became the national American game; tennis, the characteristic athletic amusement of the well-to-do (with golf as a lively competitor from about 1885 onward); Rugby football an autumnal diversion of college students and high school boys. Lowell, through its considerable British and Canadian population, likewise became celebrated in New England for its devotion to cricket and association football.

Aquatic sports, in particular, had a vogue in Lowell about 1880 such as they have not enjoyed since. Throughout the summer season the reaches of the Merrimack above the falls were alive with shells and working boats. In those halcyon days of oarsmanship good races were rowed by "Big Pat" McInerny, ex-Councilman Driscoll, janitor of the Vesper Boat Club; John Tweed, W. S. Stevens, Jack Barry, Tom Butler, Ralph Brazer and many another. Above all "Ed" Hanlon, the world's champion, liked the Lowell course and used to train on it. One of the present historian's proud recollections is to have helped put Hanlon's shell into the water at least twice and to have received a nod of acknowledgment from the sturdy oarsman. No Fourth of July amusements of late years can have equaled in general popularity the regattas of those years when for miles upstream on both sides of the river every available vantage spot was densely thronged.

The Vesper Boat Club was chartered April 9, 1875. It at first had its headquarters at Corbett's boathouse on Pawtucket street, lately moving to its own clubhouse at the head of the Pawtucket canal. In the first decade of its existence sculling was a very popular sport on the river, and the Vesper Club became one of the chief centres of aquatic interest in New England. The pleasure of canoeing began to be appreciated about 1880. Two or three of the members bought birch canoes in Canada. These craft were not altogether satisfactory. The cedar and canvas canoes were just beginning to be known and soon there was a little fleet of these. Harper's *Young People*, and perhaps other juvenile periodicals of the time, gave expositions of amateur canoe building, and many youths who frequented the boathouses helped to put together canvas canoes which, when made, might or might not need a ballast of sand bags to prevent them from tipping over. Canoe sailing came into vogue toward 1890 and, largely through Paul Butler's example and precept, the Vesper Club took a leading place at all American canoe meets.

Local baseball was never, perhaps, in the history of Lowell maintained at a greater height of public frenzy than in 1887 and thereabout. In February of that year the Lowell Baseball Corporation was organized with F. W. Howe, president; Edwards Cheney, secretary and treasurer; directors, Edward Gallagher, J. F. Callahan and H. E. Shaw. To review the history of the succeeding teams with which Lowell was represented in the New England League might not comport with the traditions of dignified historical writing. To the future student, however, of the manners and customs of the late nineteenth century the sporting pages of the Lowell newspapers will long be a source of huge amusement and instruction. In the summer of 1888, during a spirited contest with Portland for the championship, popular excitement reached an intensity that has probably never since been surpassed, and Lowell at that time had no more popular citizen than the heavy-hitting little shortstop, Hugh Duffy, afterwards a distinguished figure among the teams of the major leagues.

The Twilight of Willow Dale—Milder sports such as fishing from flatboats, swimming in fresh water and riding "flying horses," were cultivated at the several picnic resorts of the neighborhood: at Willow Dale, Long Pond, Nabnasset, Haggett's Pond and Tyng's Island.

An account of the origin of the picturesque resort on Tyng's Pond has already been given. It remains to chronicle the stirring events which attended the establishment of a second resort on this beautiful body of water and which forecasted the gradual waning of the popularity of Willow Dale.

Resentment and resistance of the now aged Jonathan Bowers and his hardy sons to street railway encroachment upon their pretty soli-

tude created a stir in Lowell in the spring of 1890. In the intervening years "Johnny" had carried on his business in his own inimitable way. The place was respectable and well kept up. It entertained hundreds of Sunday school picnics. High school graduating classes often held their dinners in the long banquet hall that projected out over the water. The fleet of flatboats that made harbor in a tiny cove, with sandy beach, were among the safest vessels that ever swam. Except for this picnic ground, much concealed by rows of willows, the shores of the lake were of almost primeval wildness. On the eastern side a sandy carriage road ran among the pines and from this there was a short cut leading over to Long Pond, where the late Charles Coburn had an even simpler and more rural resort for picnickers.

Came suddenly the Lowell & Dracut Trolley Company, with plans to buy up the whole eastern shore, install a dance hall, a rustic theatre, steamboat landing and other appurtenances of a new type of pleasure park. The cars began to bring to the "pond," now called Lake Mascuppic, cosmopolitan crowds. A whole city was suddenly emptied upon a quiet countryside.

Despite the obvious opportunities for making more money than ever before, Mr. Bowers, his wife, his sons and his nephew, Edward Caldwell, appear genuinely to have resented the change which electric traction had produced in their affairs.

Most irritating of all, the designation strips on the electric cars bore the announcement that passengers were transported to "Willow Dale." This was adding insult to injury. On April 6, 1890, Jonathan Bowers, through his attorney, warned August Fels, president of the street railway company, that his organization had no right to use the title "Willow Dale." The communication claimed that the name was an essential part of assets accumulated during fifty-three years' occupancy of the place. "The Messrs. Bowers are asking for no favors in this matter from your company, and they have instructed me to grant none," was one of the emphatic statements of the letter.

The street railway people apparently were anxious to avoid trouble, for on May 8 it was reported that an honorable agreement had been reached and that the name "Willow Dale" would be withdrawn from the cars. It was also intimated that the street car company had supposed it was doing Mr. Bowers a favor by advertising his place.

On May 28, however, to the amazement and amusement of all Lowell, an assault case was filed in the Police Court against the two sons of Jonathan Bowers and their Caldwell cousin, on the ground that they had thrown President Fels to the ground in an altercation regarding a wooden fence which the Willow Dale proprietor had erected to part his place from the electric railway domain. The elder Bowers was a witness in favor of his boys, who were finally, on June

to discharged from custody by Judge Hadley on a finding to the effect that Mr. Fels and his men had no right of way on the Bowers property and that unnecessary force had not been used in the ejectment.

A simultaneous development of Lakeview and Willow Dale followed in the next few years. Camps and cottages sprang up in every direction around the lake. The prosperity of the Bowers family presumably was not abridged by the enhanced value of their lands and by the increased demand for their products, including their celebrated Saratoga chips. The character of the whole region, however, was rapidly changed—some might say cheapened.

The genial proprietor of Willow Dale lived some years longer. He was immortalized in facile verse of "Fred" Greenhalge's, who sometime about 1892 or thereabouts wrote an often quoted Willow Dale song, to be sung to the air of "Cockles and Mussels," the first second and last stanzas of which may be quoted:

Oh, good Johnnie Bowers, how jocund the hours,
That sang their sweet chime o'er thy glimmering lake;
In June or December, 'tis sweet to remember,
Thy crispy potatoes and juicy beefsteak.

Chorus—

Oh, John of the Dale! Oh, John of the Dale,
We'll praise thy good suppers, Oh, John of the Dale.

Thy face apostolic (yet just a bit frolic)
Has brightened our banquets for many a year;
And now thy deep laughter would ring to the rafters,
And wake all the echoes on mountain and mere.

Chorus—Oh, John of the Dale! etc.

Then soft be thy pillow beneath the green willow,
And never may sorrow thy rosy cheek pale;
And we will remember, in June or December,
To praise thy good suppers, Oh, John of the Dale.

Chorus—Oh, John of the Dale! etc.

Willow Dale for some years had a rival as a picnic resort in Tyng's Island, the ancient Wickasee, which was once Wannalancet's place of residence. Especially in the days of the steamer "Evangeline," which had been somehow brought up from the sea and which plied the course from the head of Pawtucket canal under command of "Commodore" Edward B. Peirce, "the island" drew almost numberless excursions. In 1887 Daniel Emery and a number of other Lowell men took the place over and continued to run it. A personal recollection is that its character as a resort did not improve as the years went on. It later became the home of the combined Vesper and Country clubs.

Two Historical Celebrations in Lowell—Preservation of local historical data such as have been extensively used in compiling this

record of the growth of an American city, began to be a matter of organized effort soon after the war.

The formation of an Old Residents' Historical Association in 1868 meant much to every future historian of Lowell and of Massachusetts. The papers which were read at its meetings supplemented with wealth of detail and anecdote the dry records of the municipality and of the townships out of which it was formed. The association, fortunately, was started at a time when several of the founders of the city were still alive. Out of their personal recollections it was possible to save material that would otherwise have been lost completely.

The association was first proposed in September, 1868, by Z. E. Stone, then editor of the *Vox Populi*. On the 21st of the following November a meeting was called at the bookstore of Joshua N. Merrill. Fifty-four persons were present. George Brownell served as chairman, Mr. Stone as secretary. The following were appointed a committee to formulate a plan for permanent organization: John O. Green, J. G. Peabody, Charles Morrill, George Brownell, E. B. Patch, E. M. Read, Samuel Fay, Artemas L. Brooks, Charles Hovey, Z. E. Stone, E. B. Howe.

The attendance at the next meeting, on December 21, was so large that it was necessary to adjourn to Jackson Hall, where the constitution was read and adopted and officers chosen as follows: President, John O. Green; vice-president, A. L. Brooks; secretary and treasurer, Z. E. Stone.

The Historical Association held its first annual meeting in May, 1869, at which time it had eighty-five members. In 1871 Alfred Gilman became secretary and to his efforts in the next eight years were due in large measure the association's many admirable publications.

The greatest commemorative occasion in Lowell history prior to the centennial that will doubtless be appropriately celebrated in 1926, was the semi-centennial celebration of March 1, 1876.

The initiative in this celebration came from Councilman Charles Cowley, LL. D., born in England in 1832, educated in the public schools and in the law office of Josiah G. Abbott and Samuel A. Brown. As one of the historians of Lowell, upon whose works every subsequent writer has drawn, and a most enthusiastic member of the Old Residents' Historical Association, Judge Cowley was peculiarly fitted to conduct such an affair as was finally arranged at Huntington Hall.

The first premonition of a celebration was in February, 1875, when Judge Cowley, then a member of the common council introduced the following resolution: "ORDERED, That a joint special committee, to consist of the Mayor, the President of the Common Council, two members of the Board of Aldermen and three members of the Common

Council, be appointed to consider the propriety of commemorating the entry of the municipality of Lowell upon the fiftieth year of its existence on the first day of March next, and to report in what manner, if any, the same should be commemorated."

This proposal was entrusted to a committee composed of Mayor Francis Jewett; Aldermen, John A. Goodwin, Hapgood Wright; President of the Council, Albert A. Haggett; and Councilmen, Charles Cowley, Charles W. Sleeper and Edward B. Reed. Some preparations were made and Tappan Wentworth was chosen orator of the occasion. Mr. Wentworth's death, however, a few days later and the shortness of the time made it seem inadvisable to undertake the celebration until the actual expiration of the first half century—that is in March, 1876.

The matter lay quiescent for some months. On November 23, 1875, the Old Residents' Historical Association forwarded to City Hall the subjoined letter:

To the Mayor, Aldermen and Common Council of the City of Lowell:

At the quarterly meeting of the Old Residents' Historical Association, held Thursday evening, November 11, 1876, it was unanimously

Resolved, That this Association earnestly desires that there be a public celebration of the fiftieth anniversary of the municipal independence of the Town, now the City of Lowell, which occurs March 1, 1876, and will gladly coöperate with the City Council in any measure which it may adopt for that purpose.

ALFRED GILMAN,
Secretary.

The communication from the Old Residents' Association was referred to a committee consisting of Aldermen John A. Goodwin, Hapgood Wright; Councilmen Charles Cowley, W. A. Read and Francis Carll.

This committee heartily recommended that the proposed celebration be held. The proposal was likewise supported in the inaugural of Mayor Charles A. Stott. On January 3, 1876, Mr. Cowley offered the following in the council:

Resolved, That a joint special committee, to consist of three members of the Common Council and two members of the Board of Aldermen, be appointed to make all necessary arrangements for the public celebration of the fiftieth anniversary of the incorporation of the Town of Lowell, March 1, 1876, and that all papers referred to the present City Council by the last City Council, relating to the communication of said incorporation, and also so much of the Mayor's inaugural address as relates thereto, be referred to said committee.

This committee was appointed as follows: Councilmen: Charles Cowley, John F. Kimball, Edward Stockman; Aldermen: John A. Goodwin, George E. Stanley. On January 11 it made this report:

Resolved, That in commemoration of the incorporation of the Town of Lowell, the Mayor, the City Council and the citizens generally, or so many of them as may be pleased to do so, shall assemble in Huntington Hall at two o'clock p. m. on the first day of March next ensuing, being the fiftieth anniversary of said incorporation, for thanksgiving and prayer,—for singing in which the children and youth of the public schools shall join—for hearing historical addresses and letters—and for such other exercises as are appropriate to the occasion; the Mayor shall be requested to preside. From sunrise to sunset on that day the American ensign shall be displayed on the public buildings and such other places as the Mayor may direct. At meridian, on such day, a national salute shall be fired, and from meridian to one o'clock the bells shall be rung. The people of the city in general—and the survivors of the earlier inhabitants and the Old Residents' Historical Association in particular—are invited to assist in these commemorative services.

The committee of arrangements shall cause a record of such services to be published in a style uniform with other city documents, and the expense thereof shall be charged to the reserved fund.

To the celebration committee, in which the city government was represented as above, these members of the Old Residents' Historical Association were added: J. G. Peabody, John W. Smith, Alfred Gilman, Benjamin Walker, Hapgood Wright.

Under such auspices the program of March 1, 1876, went through faultlessly. All the addresses were reported stenographically. As later published in a municipal document, they embodied much information which might otherwise have never been amassed.

The forenoon services included choral singing by about five hundred pupils of the public schools, conducted by George F. Willey. Orchestral music was rendered by the Germania Orchestra of Boston. A blessing was invoked by Rev. George F. Stanton, of South Weymouth. The addresses were by Rev. Warren H. Cudworth, of Boston, and Jonathan Kimball, superintendent of schools at Chelsea.

In the afternoon session there was singing by the Lowell Choral Society and an orchestral program by the Germania Orchestra, conducted by Carl Zerrahn, the celebrated leader who had brought these musicians from Berlin about twenty years previously. The prayer was by Rev. Dr. Theodore Edson. General Benjamin F. Butler made one of the capital addresses of his career, filled with fascinating reminiscences and touching tributes.

Other addresses at the afternoon session were made by John A. Lowell, nephew of Francis Cabot Lowell; Rt. Rev. Thomas M. Clark, Protestant Episcopal Bishop of Rhode Island, who had been first principal of the Lowell High School; Hon. Marshall P. Wilder, a manufacturer whose connection with the Spindle City was close for many years; Rev. A. A. Miner, Universalist clergyman of Boston, who held

a pastorate in Lowell in the forties; Dr. John O. Green, representing the Old Residents' Historical Society. Letters containing valuable data were read from Judge Josiah G. Abbott, Seth Ames, Samuel Batchelder and others. An original poem was recited by John S. Colby, editor of the "Vox Populi."

A public levee and reception in the evening ended one of the red letter days of this era of Lowell history.

The 1876 celebration had one outcome that affects the centennial celebration to be held, presumably, in March 1926. While the city was still talking of the inspirational exercises in Huntington Hall, the councilmen received the following letter from one of the members of the celebration committee:

Lowell, March 7, 1876.

To the City Council of the City of Lowell:

Gentlemen:—Having lived in the town and city of Lowell since 1828 and been in trade since 1830, and I believe now the only person in Lowell in trade at that date, and having been thankful to Almighty God for his great goodness to me, I therefore wish in this form to give unto others of my fellow-men, for their benefit and improvement in the future here in Lowell, where I have lived so long and enjoyed so much, the small gift of one thousand dollars, if the City Council will accept the same, upon the following conditions, to wit: I wish the money to be put on interest for fifty years, the centennial year of the town of Lowell, and the interest added to the principal either annually or semi-annually, until that time, when all but the original sum of one thousand dollars may be expended for the benefit and improvement of the city and citizens of Lowell as the City Council may determine, by a two thirds' vote, upon the manner of disposing of the same at that time, it may be left to succeeding city governments to dispose of by the same two-thirds vote of the City Council. The original one thousand dollars shall again be put at interest as before described, and at the end of every fifty years thereafter, all but the original principal may be disposed of in the same manner as before mentioned.

Respectfully yours,

HAPGOOD WRIGHT.

N. B.—If there is no objection it may be called the Hapgood Wright Centennial Trust Fund.

This gift was, of course, thankfully accepted by the representatives of the city government, and the Hapgood Wright Centennial Trust Fund was put at interest.

Mr. Wright, whose benefaction thus initiated, will normally extend to Lowell's latest posterity, was born at Concord, Massachusetts, March 28, 1811. His early life was passed on a farm. As a youth he became intensely interested in Unitarianism, through his acquaintance with Rev. Ezra Ripley, then living at the Old Manse. In 1828 young Wright was sent by his father to Lowell to sell some produce. The energy and bustle of the new town impressed him, and he determined to settle in it. A short time later he found a clerkship in a shoe shop

on Central street and thus entered upon his long and honorable mercantile career. From 1830 to 1840 he was in partnership with Elijah Mixer. From the first he was prominent in the affairs of the new Unitarian church. In 1844 he actively assisted in the foundation of the Ministry-at-Large. In 1869 he served in the Board of Aldermen. "Probably no trader in Lowell," said his contemporary, Benjamin Walker, "has ever exceeded Mr. Wright in the length of his business experience, and certainly no one has ever acquired and maintained a more enviable reputation than he for upright and honorable dealings." In 1881 Dartmouth College gave Mr. Wright a well-merited honorary degree of Master of Arts. He died May 14, 1896.

Throughout his long life Mr. Wright maintained a live interest in his birthplace and when, in September, 1885, Concord celebrated the 250th anniversary of its founding, he endowed a memorial fund in the same amount and under the same general conditions as that given to Lowell. He also had given the "Lowell Courier" to the Concord Library from 1843 onward, and at the time of the celebration he gave the town \$300, the interest to be used to make the gift perpetual as long as such a newspaper shall be published.

The 1886 Celebration—A fitting celebration of the fiftieth anniversary of the incorporation of the City of Lowell was arranged in the winter of 1886.

One of the moving spirits in this dignified and appropriate celebration was Councilman Laurence J. Smith, who introduced the original order and who directed many of the subsequent arrangements.

Mr. Smith was thoroughly representative of what the city was doing for the children of newcomers from abroad. Born in County Meath, Ireland, June 13, 1850, he was brought to Lowell as a child by his parents and given public school education up to the age of fourteen. He then had thirteen years' service with the Middlesex Manufacturing Company, acquiring a thorough knowledge of textiles and textile values. In the meantime he had been employed during certain evenings of the week as a clothing salesman and had become interested in the merchandising of fabrics. In 1877 he was made manager of the Lowell One Price Clothing Company, then one of the "coming concerns" of the city. Mr. Smith's ability as buyer and seller of fabrics made him a source of strength to this store. He interested himself early in public affairs, serving as a Democratic member of the Common Councils of 1881, 1882, 1883 and 1886; as a member of the library directorate and the police commission. He was one of the early members and later supreme chief ranger of the Foresters of America. It fell to this admirable citizen to take the lead in expressing public gratitude for the far-sightedness of the founders of Lowell.

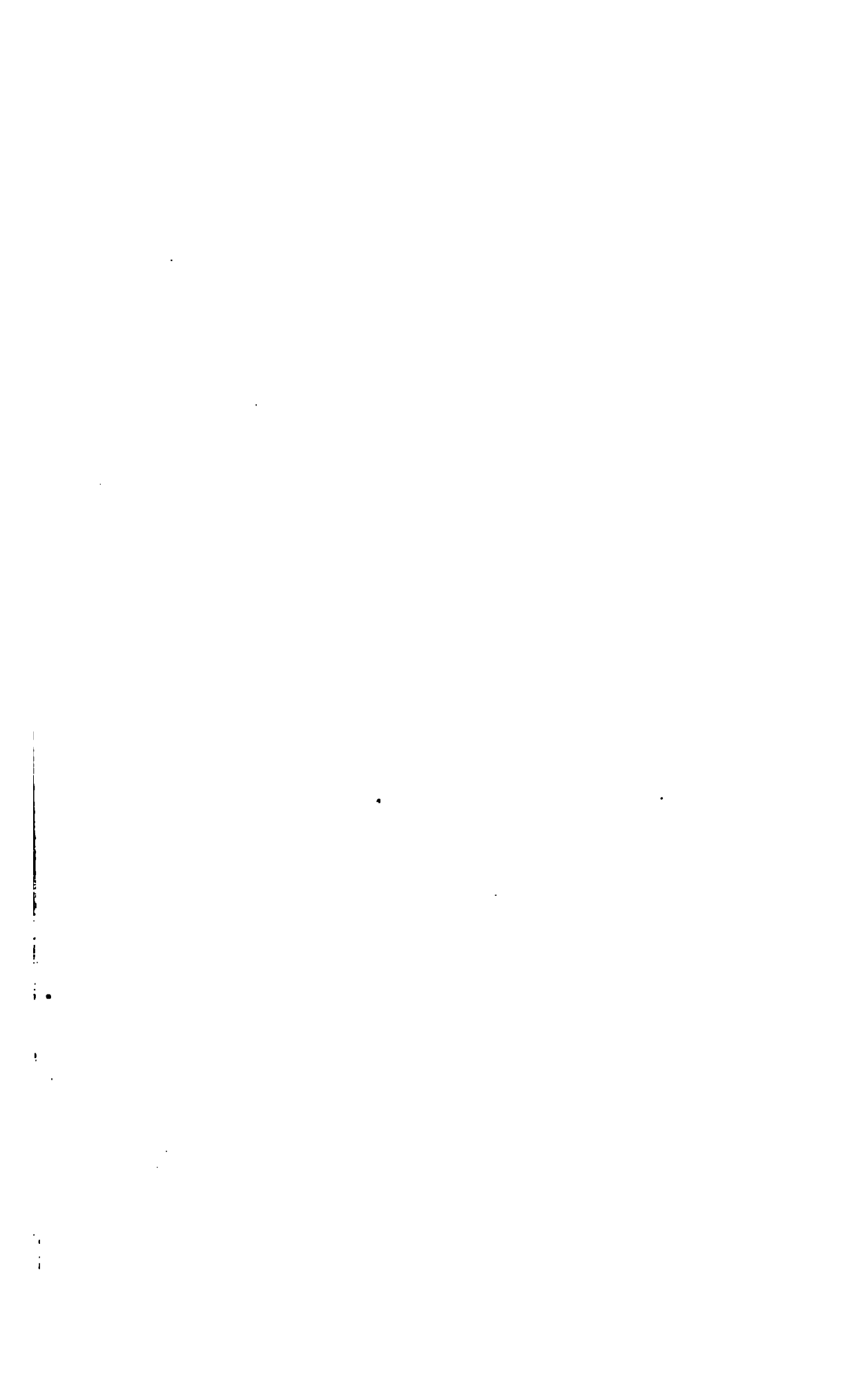
With active approval and coöperation of Mayor J. C. Abbott a series of meetings was set for April 1, 1886, in Huntington Hall.

At the morning exercises four hundred children of the public schools were brought together as a chorus under direction of H. D. Day. Councilman Smith presided. The prayer was by Rev. George W. Bicknell. Form Principal C. C. Chase, of the high school, read a retrospective address, many extracts and citations of which have already appeared in this narrative.

In the afternoon Mayor Abbott gave a brief introductory address. Then after a prayer by the Rev. Owen Street, Hon. Frederic T. Greenhalge delivered one of the best commemorative addresses of his career, calling attention to patent defects in the working out of the Lowell plan, but crediting the founders with large insight and noble aims. In the evening came a general levee and reception.

The committee in charge of these exercises consisted of: Honorary chairman, Mayor J. C. Abbott; chairman, Laurence J. Smith; aldermen, Jeremiah Crowley and James B. Francis; councilmen, Roswell M. Boutwell, Charles S. Richardson and Charles H. Hobson. On the reception committee were William F. Salmon, Artemas S. Tyler, Oliver E. Cushing, Thomas R. Garity, George A. Marden, Solon W. Stevens, Albert A. Haggett, Prescott C. Gates, Walter Coburn, Walter H. Leighton, James W. Bennett, George F. Lawton, David W. O'Brien. The chief marshal was General Charles A. R. Dimon, who was assisted by the following young men: Paul Butler, Edward H. Shattuck, W. E. Westall, John Welch, Robert E. Crowley, Edward Ellingwood, H. G. O. Weymouth, Royal W. Gates, James A. Carney, J. H. Carmichael, A. W. David, E. B. Conant, Charles F. Blanchard, Henry V. Huse, W. W. Tuttle. The addresses, of this celebration, including many letters of congratulation and reminiscence from former residents of the city, were subsequently published.





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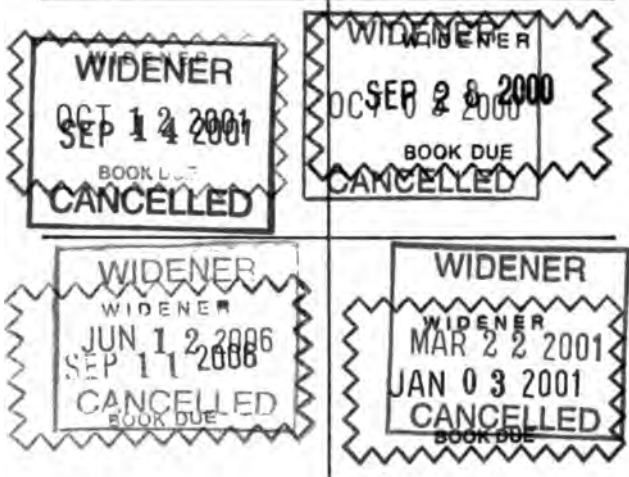
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